

RUDERALIS: PLANT OF THE FUTURE

HIGH TIMES

NOVEMBER 1987

\$3.95
CANADA \$4.50

K48427

**MARIJUANA AND
YOUR HEALTH
THE REAL FACTS**

**COOKIN'
WITH POT**

**RASTA
RECIPES**

EXCLUSIVE
NEW SCIENCE
FICTION BY
WILLIAM
GIBSON



Indoor Sun

ENERGY EFFICIENT GROW LIGHTS

METAL HALIDE—(balanced growing spectrum)

All systems include assembled ballast, bulb, reflector, 15' lamp cord & 8' power cord.
★ 1000 watt DELUXE—Your choice of one of four great reflectors: 46" Polished aluminum super reflective hood (white available on request). □ Our new 20" low profile (only 7" high) horizontal reflector with a space-age polished aluminum reflective panel (puts out 45% more light than conventional reflectors). □ 48" parabolic, high output reflective hood. □ 20" adjustable white enamel reflector.
Each deluxe unit comes with a super quiet ventilated ballast box with a high quality 6-outlet power supply with a lighted on/off switch and a 15 amp circuit breaker. System includes a 110,000 lumen-12,000 hr. bulb \$184.50 To upgrade to our 125,000 lumen-12,000 hr. Horticultural Superbulb Add \$15.00
★ 1000 watt STANDARD—18" high temp. white enamel reflector. Ventilated ballast box. System includes a 110,000 lumen—12,000 hr. bulb \$167.50 To upgrade to our 125,000 lumen—12,000 hr. Horticultural Superbulb Add \$15.00
★ 1000 watt ECONOMY—2'x3' polished aluminum reflective hood (not shown). Assembled open ballast. System includes a 110,000 lumen—12,000 hr. bulb \$144.50 To upgrade to our 125,000 lumen—12,000 hr. Horticultural Superbulb Add \$15.00
★ 400 watt DELUXE—14" high temp. white enamel reflector. Ventilated ballast box with a high quality 6-outlet power supply with a lighted on/off switch and a 15 amp circuit breaker. System includes a 34,000 lumen—20,000 hr. bulb \$134.50 To upgrade to our 40,000 lumen—20,000 hr. Horticultural Superbulb Add \$10.00
★ 400 watt STANDARD—14" high temp. white enamel reflector. Ventilated ballast box. System includes a 34,000 lumen—20,000 hr. bulb \$124.50 To upgrade to our 40,000 lumen—20,000 hr. Horticultural Superbulb Add \$10.00
★ 400 watt ECONOMY—2'x3' polished aluminum reflective hood (not shown). Assembled open ballast. System includes a 34,000 lumen—20,000 hr. bulb \$109.50 To upgrade to our 40,000 lumen—20,000 hr. Horticultural Superbulb Add \$10.00
★ 175 watt MINI-MIGHT METAL HALIDE—15" reflector with self-contained ballast. 15,000 lumen-20,000 hr. bulb (only 18c/day to operate) \$99.00

HIGH PRESSURE SODIUM—(red orange spectrum)

Completely assembled. All systems include a covered ventilated ballast, bulb, reflector, 15' lamp cord and 8' power cord.

★ 1000 watt DELUXE—Your choice of one of four great reflectors (5 KV pulse rated socket included): □ —46" Polished aluminum super reflective hood (white available on request) —Our new 20" low profile (only 7" high) horizontal reflector with a space-age polished aluminum reflective panel (puts out 45% more light than conventional reflectors) □ —48" parabolic, high output reflective hood □ —20" adjustable white enamel reflector □ System includes a 140,000 lumen—24,000 hr. Sodium bulb \$269.50
★ 400 watt DELUXE—14" high temp. white enamel reflector. Includes 50,000 lumen—24,000 hr. Sodium bulb \$189.50
★ MINI-MIGHT GROW LIGHT—Our compact powerful (16,000 lumens) grow light employs a highly efficient High Pressure Sodium lamp (3 year bulb life) and a self-contained Transformer-Ignitor. Costs only 15¢ a day (18 hours on) or about \$4.50/month to operate. 15" reflector—good for 3'x3' area. Sale priced at \$99.00+\$5.00 shipping, anywhere in U.S.A. \$99.00

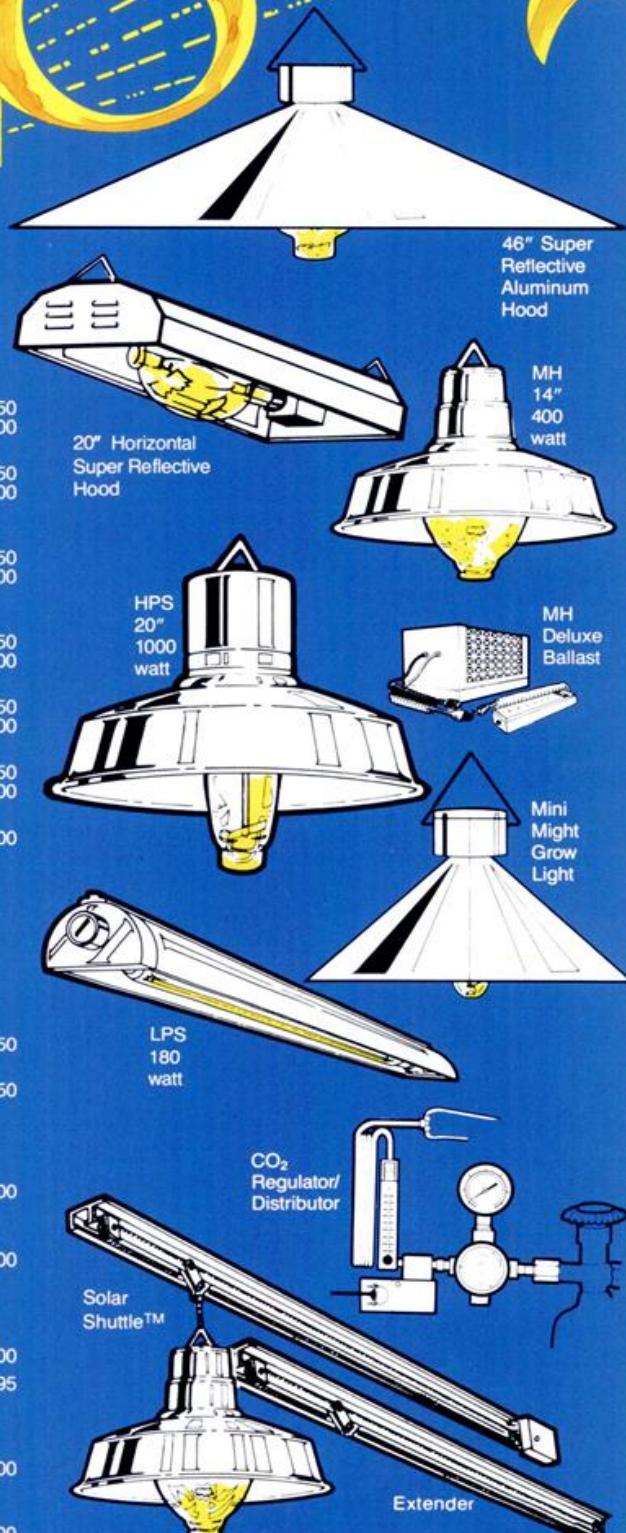
LOW PRESSURE SODIUM—(our most efficient light)

★ 180 watts produce 33,000 lumens. Great for flowering. Excellent for side light. Deluxe fixture. Ventilated ballast box \$195.00

ACCESSORIES:

Replacement light bulbs available for all our systems at our low everyday prices.
★ High Pressure Sodium Conversion Bulbs that work in metal halide ballasts. 1000 watt—24,000 hr. \$139.00 400 watt—24,000 hr. \$69.00
★ 15 amp Paragon timer (works on all our systems) \$14.95
★ CO ₂ Regulator/Distributor—Maintains CO ₂ at a constant level while the light is on to promote up to 25% increase in growth. For growing areas 25 sq. ft. to 1000 sq. ft. Includes all gauges and distribution lines. Plugs into your light's timer (tank not included) Sale Priced \$139.00
★ Solar Shuttle™ Track—moves your lamp quietly and efficiently back and forth above your plants on a 6-foot track in 40-minute cycles increasing the coverage of your lamp \$99.00
★ Solar Shuttle™ Extender—adds another 6-foot track to the end of your Solar Shuttle™ so you can run two lights off of one shuttle \$39.95

Grow and Bloom Nutrient in granular and liquid form available on request.



ONE YEAR PARTS & LABOR GUARANTEE • 30 DAY MONEY BACK GUARANTEE • MOST ORDERS SHIPPED IN 24 HOURS
C.O.D. ORDERS WELCOME • NO DEPOSIT REQUIRED
QUANTITY PRICES AVAILABLE • CALL FOR FREE CATALOG.



ENERGY SAVERS UNLIMITED, INC.

22138 SOUTH VERNON AVE. #C, TORRANCE, CA 90502

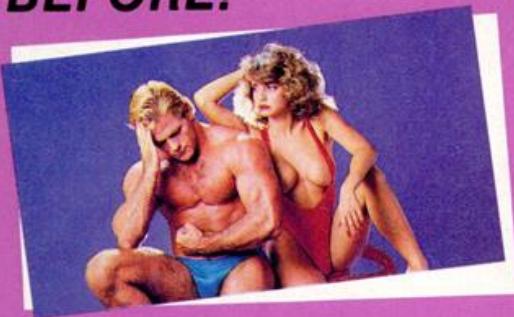
Toll Free Outside California (800) 421-2994 In California Call Toll Free (800) 538-3400



Prices do not include shipping.

**GET THINGS
GOING WITH**

BEFORE!



**NOT
SURE?
SAMPLE
PACK**

MAXI PACK
1000 TABLETS & CAPSULES
TOTAL/10 TYPES
\$42.50
CODE #26

MINI PACK
500 TABLETS & CAPSULES
TOTAL/5 TYPES
\$22.50
CODE #31

INGREDIENTS MAY VARY

20 20

1000 / 100
\$28.50 / \$8.25
CODE #3
300 MGS CAFFEINE

30 30

1000 / 100
\$28.50 / \$8.25
CODE #4
325 MGS CAFFEINE

MAGNUM

1000 / 100
\$32.50 / \$7.00
CODE #8
357 MGS CAFFEINE

HANGOVER HELPER™

-RELIEF FROM HANGOVERS™

45 TABLETS \$6.95
90 TABLETS \$12.95
180 TABLETS \$24.95
"FREE SAMPLES"

CODE #7

AFTER!



**FREE INFORMATION
(213) 376-7422**

PAYMENT:

- MONEY ORDER
- PERSONAL CHECK (MUST BE BANK PRINTED WITH THE SHIP TO ADDRESS, ACCOUNT MUST BE 6 MONTHS OLD, NO CHECKS OVER \$50.00)
- PAYMENT TO 20TH CENTURY DISTRIBUTORS)
- C.O.D. (CASH ON DELIVERY) (PHONE IN ONLY)
- ALL ORDERS IN US FUNDS
- Offers subject to change without notice. Take only as directed. Read all package statements, no sales to minors or where prohibited by law. The advertised products have various levels of non-controlled ingredients. O.T.C.'s Not to be Mixed with Alcohol.

NOTE
Our products bear our trademark. They cannot be confused with any other product on the market. Any attempts to offer these products for sale as a controlled substance or prescription drug may be a crime. This may result in criminal prosecution. Compliance with any law is the purchasers responsibility. Caution: Individuals under medical care should consult their physician.

FAST ONES™

STIMULANTS, DIET AIDS SLEEPING AIDS

**FREE 100
#30**

With any purchase. Send \$3.00 additional to help cover shipping and handling.

LOWEST PRICES ANYWHERE

WE WILL MEET OR BEAT ANY

REASONABLE PRICES BY 10%

ORDERS SHIPPED IN 24 HOURS

100% GUARANTEE

FAST ONES™
"Super Strength"

SALE
1000 \$32.95 \$29.95
100 \$3.95 \$2.25

FAST ONES

"FREE SAMPLES"
CODE #30
300 MGS CAFFEINE

"FREE SAMPLES"
CODE #2
1000 \$18.95 \$16.95
200 MGS CAFFEINE

FAST ONES™ FIGHTS THAT DROWSY FEELING BY IMPROVING YOUR STAMINA, COORDINATION, CONCENTRATION!

FAST ONES™ NEVER LETS YOU MISS THOSE SPECIAL MOMENTS!

FAST ONES™ GIVES YOU EXTRA STAMINA TO LOSE THOSE UNWANTED POUNDS AND INCHES THAT MAKE YOU FEEL SO UNATTRACTIVE AND UNDESIRABLE!

FAST ONES™ LETS YOU LIVE A MORE EXPERIENCING LIFE!

CHOOSE FROM A WIDE VARIETY TO GET YOUR EXACT TYPE AND STRENGTH YOU PREFER. THAT'S SOMETHING STORES CAN'T DO!

NOTE: SAMPLES ARE FREE BUT WE ASK THAT YOU ENCLOSE \$1.50 PER SAMPLE TYPE YOU WANT TO COVER SHIPPING AND HANDLING CHARGES. (EXAMPLE 3 SAMPLES TOTAL \$4.50)

NOTE: EACH SAMPLE HAS 5 PILLS ENCLOSED.

REGULAR
500 MGS CAFFEINE
CODE #2
1000 \$18.95 \$16.95
200 MGS CAFFEINE

MEDIUM

MILD (THICK)
1000 / 100
\$22.50 / \$8.75
210 MGS CAFFEINE
CODE #7
1000 / 100
\$22.50 / \$8.75
200 MGS CAFFEINE
CODE #5

Orders Shipped in 24 Hours!

Sub-Total:
Add 6.5% Tax
(CA Res.)
Shipping \$3.00
Total

NIGHTY NIGHT
SURE CURE II
DIET AID
APPETITE SUPPRESSANT

SURE CURE II

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.95 / \$8.95
25 MGS EPHERDRINE
CODE #10

100 / \$8.95
DIPHENHYDRAMINE
CODE #25

1000 / 500
\$16.95 / \$8.95
TIME RELEASED
#24

1000 / 100
\$17.

When Discretion Is Your Growing Concern.



Why The Closet Farmer™? Not everyone has an acre of green these days. Yet urban, rural and apartment dwellers are still anxious to exercise that green thumb. Like you, they are searching for innovative, sophisticated ways to bring the garden indoors without building a greenhouse or closing off an entire room.

What sets the CLOSET FARMER apart is that it is completely contained in a sleek, stylish piece of furniture! A free standing closet that will enhance any room—without a hint of the high tech growing system that lies within.

URBAN PLANTATION™ is always working to bring you the lastest technology and best values. Hydro Willie is proud to introduce the newest CLOSET FARMER Packages III & IV. With the CLOSET FARMER's advance dirt or hydroponic systems, whether you're a beginner or an old pro, there is a CLOSET FARMER System for you at savings that you can't pass up.

New CLOSET FARMER IV

- Color: White
- Cabinet Size: 71 1/4" h x 35 5/8" w x 23 1/2" d
- 400w Halide (32,000 lumens) or HPS, 12" Hood & Remote Ballast
- Intake: 100 CFM Axial Fan (Dayton)
- Exhaust: 140 CFM Exhaust Blower (Dayton)
- Thermostat (Dayton)
- Multi-Outlet Strip "6"
- 24 Hour Timer
- One Year Supply of Nutrients
- Mylor, Lite Sealed, Complete Instructions

Sale Price \$499.00

DELUXE CLOSET FARMER IV includes CO₂ Enrichment Kit & 3 AquaFarms.

Sale Price \$785.00

New CLOSET FARMER III

- Color: White
- Cabinet Size: 71 1/4" h x 35 5/8" w x 23 1/2" d
- 250w Halide (20,500 lumens), 10 3/4" Hood & 160w side lighting (Spectra Lights—spectrum of sunlight)
- Intake: 100 CFM Axial Fan (Dayton)
- Exhaust: 100 CFM Exhaust Blower (Dayton)
- Thermostat (Dayton)

- Multi-Outlet Strip "6"
- 24 Hour Timer
- One Year Supply of Nutrients
- Lite Sealed, Complete Instructions

Sale Price \$475.00

DELUXE CLOSET FARMER III includes CO₂ Enrichment Kit & 3 Aqua Farms.

Sale Price \$755.00

CLOSET FARMER II

- Color: Oak
- Cabinet Size: 63 3/4" h x 33" w x 23" d
- 175w Halide (15,000 lumens) & 10 3/4" Hood or 150w (16,000 lumens) with side lighting (Spectra Lights—spectrum of sunlight)
- Intake: 100 CFM Axial Fan (Dayton)
- Exhaust: 69 CFM Exhaust Blower (Dayton)
- Thermostat (Dayton)
- Multi-Outlet Strip "6"
- 24 Hour Timer
- One Year Supply of Nutrients
- Mylor, Lite Sealed, Complete Instructions

Sale Price \$455.00

DELUXE CLOSET FARMER II includes CO₂ Enrichment Kit & 3 AquaFarms.

Sale Price \$735.00

CO₂ Tanks Sold Separately Price \$99.00

URBAN PLANTATION Accessories

The CLONING FARMER™ Kit will turn any existing CLOSET FARMER into an efficient CLONING GENERATOR™. Kit includes pumps, pH kit, a one year supply of grow rock and rock wool and nutrients.

Price \$269.00

CUSTOM FARMER™ Kits and Consultation Services

Hydro Willie can outfit any closet or room in your home—Kits start at \$200.00.

Hydro Willie is the creative force behind URBAN PLANTATION and the CLOSET FARMER. With 11 years experience as an authority on hydroponic gardening and agriculture he is committed to providing you with the finest quality, easy to operate products, at fair prices with the fastest delivery. He is ready to answer all your questions and to support your URBAN PLANTATION purchases with the friendliest and most dependable service in the indoor growing industry.

Our Guarantee To You

URBAN PLANTATION offers you the finest self contained growing systems ever developed. Following the easy set up, a mere 15 minutes of weekly maintenance can yield 100% results within 3 months.

All our lamps carry a one year warranty. All other products carry a full 2 year guarantee. Ask for our free catalog, compare prices, save time, energy, and money.

Visit our showroom or write to:



#6 Bolinas Road, Fairfax, CA 94930
For Ordering or Free Catalog Call Toll Free

800-332-7555

California Residents Call 415/258-9226

Receive a free URBAN PLANTATION "T" Shirt with every CLOSET FARMER. California residents please add 6% sales tax. Money orders, credit card and C.O.D. orders shipped within 48 hrs. C.O.D. orders require a 50% deposit. Above prices do not include shipping. Personal checks held for bank clearance. Dealer inquiries are welcome. AQUAFARMS manufactured by General Hydroponics. CLONING GENERATOR is trademarked and especially made for THE CLOSET FARMER by General Hydroponics.

CONTENTS

AMILLIA NAIRE



FEATURES • COLUMNS • DEPARTMENTS

MARIJUANA AND YOUR HEALTH

by Peter Gorman 32

You've seen the scary TV commercials and heard the phony government facts, now read the *real* story on the potential hazards of marijuana smoking.

CYBERPUNK/WILLIAM GIBSON INTERVIEW

by Lou Stathis 37

Cyberpunk is changing the face of science fiction. Former *Heavy Metal* editor Lou Stathis gives the scoop on what cyberpunk is about and interviews William Gibson, the progenitor of the genre.

THE SILVER WALKS

by William Gibson 40

Straight off writing the screenplay for "Aliens III," cyberpunk's leading light sends us a chapter from his upcoming book, *Mona Lisa Overdrive*.

THE COCAINE-CONTRA CONNECTION

by Joel Millman 42

The ever-murkier, never ending story of Contra drug smuggling and arms shipments.

CHEF RA'S PSYCHEDELIC KITCHEN

by Ra James 45

Introducing our new food columnist. Ra's recipes are guaranteed to put the *ital* in your *vital*!

THE SWEDISH INVASION

by Michael J. Weldon 56

The Psychotronic guy travels to Sweden and finds, much to his surprise, the world's leading underground rock scene.

On the cover: Chef Ra,
photograph by Andre
Grossmann.

HEP CAT

by John Holmstrom/Aid MacSpade 52

HIGH ART

by Carlo McCormick 55

ASK ED

by Ed Rosenthal 62

THE RUDERALIS FACTOR

by Ed Rosenthal & Jorge Cervantes 64

The best thing about *ruderalis* is that most cops don't even know it's marijuana. The plant also flowers immediately—regardless of photo period. But will it get you high? Two growing experts face off on the biggest outdoor growing controversy of the year.

RUSHES

by Jim Poling 85

THE HOUND'S EYE VIEW

by James Marshall 96

TOP 100

by John Holmstrom 97

Oh boy, you won't believe who's #1! Is this supposed to be some kind of sick joke, readers?

LETTERS 6**HIGHWITNESS NEWS**

edited by John Holmstrom 19

Cokehead cops, pirate radio, Lawrence Taylor, Go-Go Girl of the Month, and other assorted tidbits designed to whet your appetite for what lies ahead.

TRANS-HIGH MARKET QUOTATIONS

compiled by Espy LaCopa 25

TRANS-HIGH MARKET ANALYSIS LETTERS 27

Join the wild hemp hunt and win a free HIGH TIMES subscription.

CENTERFOLD 50

Indica bud goes fast these days, but not this fast.

CLASSIFIED 78**PRODUCTS 69****BOOKSTORE 94**

CAPTAIN WHIZZO

HIGH ★ TIMES

PUBLISHER
ROBERT ARONSON
EXECUTIVE EDITOR
STEVEN HAGER
ART DIRECTOR
DAVID ALLEN
MANAGING EDITOR
JOHN HOLMSTROM
SENIOR EDITOR
DEAN LATIMER
ASSOCIATE EDITOR
ED ROSENTHAL
CANNABIS CONNOISSEUR
D.C.
CONTRIBUTING EDITORS
ROBERT CONNELL CLARKE, THE GENERAL,
PETER GORMAN, JAMES MARSHALL,
CARLO McCORMICK, JIM POLING,
MICHAEL WELDON, BRADFORD X
DESIGN ASSOCIATES
ALICE LEWCZYK, MAXI, BRIAN SPAETH
TYPESETTING
BARBARA BARG
STRONG SILENT TYPE
CONTRIBUTING ARTISTS AND PHOTOGRAPHERS
FLICK FORD, ANDRE GROSSMANN,
GREGORY HERGERT, DICK HOOLE, KATE KELLER,
MILTON KNIGHT, JAMES ROMBERGER,
JONATHON ROSEN, JEFF VAUGHAN
CONTROLLER
SHEILA AVON
CIRCULATION MANAGER
CAROLYN DEDERICK
PRODUCTS MANAGER
SCOTT DANAHY
STAFF
TIFFANY ANN, JONATHAN DAVID,
deerfrance, LISA KAY, COLIN MINER
ADVERTISING
EAST COAST
SANDY ROSEN, MANAGER
SHERRY LUTZ
PROMOTION DIRECTOR
MONIQUE COPELAND
NATIONAL ADVERTISING OFFICE
211 East 43rd Street
New York, NY 10017 (212) 972-8484
WEST COAST
STEVE BECKER, MANAGER
WEST COAST ADVERTISING OFFICE
P.O. Box 33-Suite 373
Long Beach, CA 90801 (213) 493-3714
FOUNDING EDITOR
THOMAS KING FORCADE, 1945-1978

November 1987 • No. 147 • HIGH TIMES (ISSN #0362-630X) is published monthly by Trans-High Corporation, Robert Aronson, President • Mail subscriptions (payable in U.S. funds) and changes of address (please include most recent mailing label) to P.O. Box 410, Mt. Morris, IL, 61054. • Allow 6 to 8 weeks for delivery of first issue or for change of address • Subscriptions in the United States: 12 issues for \$29.95, 24 issues for \$54.95 • Single copy price: \$3.95 • In Canada: 12 issues for \$37.45, 24 issues for \$68.95 • All other countries by surface mail: 12 issues for \$37.45 • All other countries by airmail: \$67.00 • Offices at 211 E. 43rd St., New York, NY 10017 • Second class postage paid at New York, NY, and at additional mailing offices • Manuscripts must be accompanied by a self-addressed stamped envelope • All contributions will be carefully considered, but the publisher and editors assume no responsibility for loss or injury to unsolicited material • Copyright ©1987 by Trans-High Corporation. Nothing in this publication may be reproduced in any manner, either in whole or in part, without specific written permission of the publisher. All rights reserved. "High Times" is a registered trademark. HIGH TIMES and Trans-High Corporation assume no responsibility for any claims or representations contained in this magazine or in any advertisement, nor do they encourage the illegal use of any of the products advertised herein. All advertising and advertised products void where prohibited. Postmaster: Please send address changes to HIGH TIMES, P.O. Box 410, Mt. Morris, IL, 61054.



● Send your letters to HIGH TIMES "Letters," 211 E. 43rd St., NY, NY 10017.

BAD NEWS

I thought your Summer of Love issue was swell, especially seeing the Dead album sheet. But there's bad news. The guy who's been producing these high quality sheets got busted at the show in Philly on Friday, July 10th. Apparently I got the last two pages before he went down.

I would just like to express my greatest appreciation for the work this guy's done and my deepest sympathy for the trouble it's caused him.

Also, to the cop who busted him:
Fuck you.

—A.Z.
Louisville, Kentucky

PARTY ANIMALS

I'm a 15-year-old Dead/Pothead, and I'd like to protest the trashing of my generation by Ken Weiner and The General. Sure it's true we have a few more asshole yuppie kids than you guys had in the '60s and '70s, but there're quite a few of us that know full well what it is to drop acid or become so drunk that you vomit out your digestive track. The problem with yuppies is that their parents didn't fuck up their minds enough.

—Scruffy Pete,
Brooklyn, New York

I just finished reading your article on "You Gotta Fight, Kill & Maim for Your Right to Party." As I take a hit of hash from my bong, I must say I totally agree! They tell us this is a free country, but every day there's something else you can't do. Soon we'll have another Russia on our hands.

—The Wild Woman
Newport, Vermont

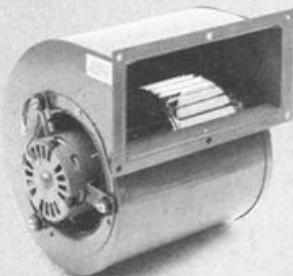
I am a 30-year-old home-grower (indoors), and now spend most of my time with either pot or LSD. I am writing because I resent articles such as the one in your August '87 "wild party" issue, which featured a tirade by Ken Weiner and the General. This article is just the sort of thing you guys keep doing over and over again to slit your own throats. The text of the article is boring, juvenile trash, and the photo feature after, "How to Throw a Party" was a fun, but essentially tasteless piece of anti-propaganda.

Do you imagine for a moment that those who stand against us do not read your magazine in order to gain an understanding of their enemy? What do they see? Not something to show them that we are another type of civilized human being—nooo—we gotta be party animals, man!

This is stupid. The trashed image of The General, laying on the floor at the end of the article was every parent's

continued on page 14

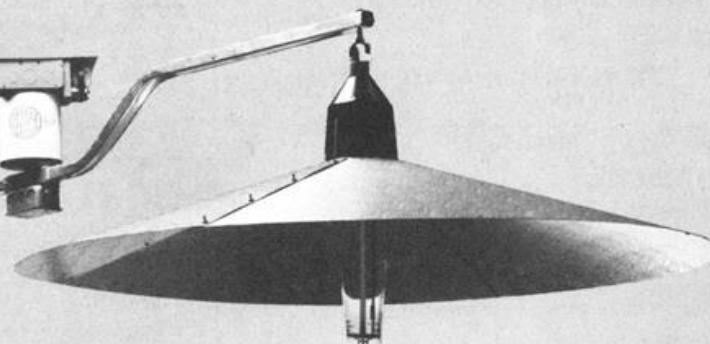
DIAMOND LIGHTS



See our catalog for the complete line of blowers, thermostats and humidistats.



SUN CIRCLE 3™—3 light balancer, 360° continuous rotation, 50 minute cycle (min. room size 12' x 12') . . . \$248.00

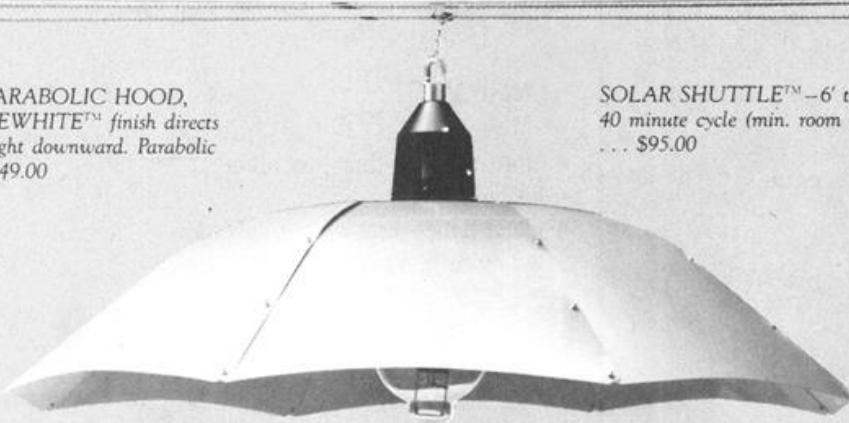


SUN CIRCLE 2™—2 light balancer, 360° continuous rotation, 50 minute cycle (min. room size 10' x 10') . . . \$189.00



Our new 45° PARABOLIC HOOD, with TEXTUREWHITE™ finish directs 100% of your light downward. Parabolic hood only . . . \$49.00

SOLAR SHUTTLE™—6' track, 1 light, 40 minute cycle (min. room size 4' x 10') . . . \$95.00



THE ULTIMATE IN INDOOR GROWING ACCESSORIES

With today's indoor gardening technology jumping in leaps and bounds, it's hard to find a quality indoor garden supplier that can keep the pace.

Look no further, we are Diamond Lights. We specialize in a full and complete range of what we believe to be the finest indoor growing equipment available. Backed by professional, knowledgeable and courteous sales people, who actually listen to your needs.

What about prices? Compare our prices to any indoor garden store in

the United States. We will not only save you money, but our products are backed by warranties and the quality reputation of Diamond Lights.

WE'RE SHIPPING DAILY

With other stores, after placing your order, you could wait days or even weeks for an item you needed yesterday. Not at Diamond Lights. Every order placed with us is shipped via UPS, within 24 hours, and in plain boxes. Names and addresses held in strict confidence. (See catalog for complete ordering and shipping information).

You've done enough work already, let us help you with the rest.

Phone TOLL FREE 800-331-3994 or in CA 415-459-3994 for ordering and our FREE new 1988 catalog.

- Money order, credit card, COD orders shipped within 24 hours.
- Prices do not include shipping.
- Dealer inquiries welcome.

SEE OUR AD ON INSIDE BACK COVER DIAMOND LIGHTS

"We are different from the rest"

713 Mission Avenue • San Rafael, CA 94901
Diamond Lights products are also available in these other locations:

MAH

151 Alkier St., Brentwood, NY 11717
516-231-9472

GROWERS SUPPLY
680 Maplehill Dr., Kalamazoo, MI 49009
616-349-8566





• For fast convenient delivery or factory store sales, call/visit:

APPLIED HYDROPONICS, INC.

Western U.S.-S.F. Eastern U.S.-Phila.

3135 Kerner Blvd. 208 Route 13
San Rafael, CA 94901 Bristol, PA 19007
1-800-634-9999 1-800-227-4567

• For walk-in buying, visit your nearest authorized retailer:

California

Applied Hydroponics—L.A.
4527 San Fernando Rd.
Glendale, CA 91204
(818) 243-0068

Colorado

Rocky Mountain Lighting & Hydroponics
7100 North Broadway, Suite 5-S
Denver, Colorado 80221
(303) 428-5020

Illinois

Chicago Indoor Garden Supply
108 N. Barrington Rd.
Streamwood, IL 60107
(312) 289-4545
Chicago South; Call
(312) 877-1616

High Tech Indoor Gardening
2164-B. Washington Rd.
Washington, IL 61571
(309) 745-5813

Indiana

Worms Way Organic Indoor/Outdoor Garden Supply
4620 S. State Road 446
Bloomington, IN 47401
(812) 837-9901

Michigan

Indoor Garden Center Inc.
8539 Lilley Rd.
Canton, MI 48187
(313) 451-0797

New York

Indoor Sun Systems
61 Allwood Ave.
Central Islip, NY 11722
(516) 234-2260

Ohio

Waterbeds and Stuff
3788 W. Broad St.
Columbus, OH 43228
(614) 276-4722
Plus five other Central Ohio locations

Texas

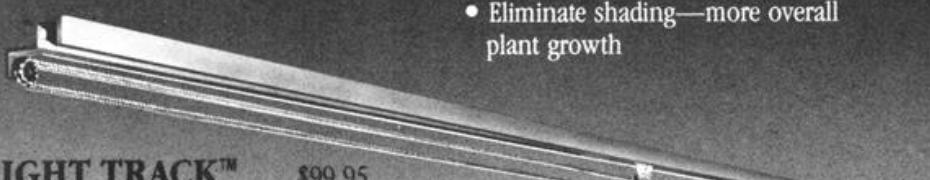
Sun Belt Garden Supply
2669 Myrtle Springs Ave., Ste. 104
Dallas, TX 75220
(214) 350-9246

Prices, special offers, and hours may vary from store to store.

Light Movers

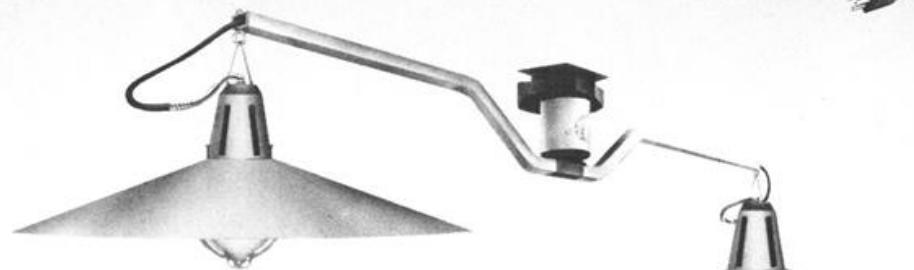
- Increase production
- Grow more plants with the same light

- Taller plants; get 6-12" closer to your light
- Eliminate shading—more overall plant growth



LIGHT TRACK™ . . . \$99.95

- Best one-light movement system
- Extender available for second light (\$39.95)
- Bonus! Free grounded multi-plug (\$7.95 value) included (light not included)



SUN CIRCLE™ . . . \$199.95

- Move two lights in a full circle
- More coverage than any other light mover
- Blend halide and sodium lights for optimum flowering (lights not incl.)



CYLINDERS OF SUNLIGHT™

Recommended for seedlings and cutting starts, low ceilings. Same spectrum as the sun. Twisted for more light.
Box of six 48" tubes . . . \$69.95

ITEM	PRICE EA.	QTY
Hydrolite Super <input type="checkbox"/> 21" <input type="checkbox"/> 45" <input type="checkbox"/> coated	\$199.95	_____
Hydrofarm Quad	\$199.95	_____
Hydrolite 400	\$139.95	_____
Hydrofarm Solo	\$64.95	_____
HPS 1000	\$264.95	_____
HPS 400	\$189.95	_____
CO: System	Sale \$149.95	_____
Light Track	\$99.95	_____
Sun Circle	\$199.95	_____
Cylinders of Sunlight, 6pk/48"	\$ 69.95	_____
15A Timer (<input type="checkbox"/> Free with light & garden)	\$ 19.95	_____
1000W Super bulb <input type="checkbox"/> clear <input type="checkbox"/> coated	61.95	_____
Grow Nutrient (20-6-16) 1 lb./100 gal	\$ 12.00	_____
Bloom Nutrient (10-30-18) 1 lb./100 gal	\$ 13.00	_____
	SUBTOTAL	_____
	Ca. & Pa. Res. add 6% tax	_____
	TOTAL	_____

Two Year
Guarantee
(Bulbs One Year)



Why buy from us? Applied Hydroponics has been the **leading manufacturer** of indoor gardening equipment since 1977. We're the **oldest** and the **largest**. Time-tested and proven by tens of thousands of satisfied **High Times** buyers, our record speaks for itself. Top quality, reliability, and personal service backed by our full **two-year guarantee**, the longest on the market, makes us the only answer for those who want to grow.

Money orders, cashiers checks, COD & credit card orders shipped immediately. All items shipped freight collect in plain boxes.

Visa Mastercard Exp. Date _____

Name _____

Address _____

City/State/Zip _____

APPLIED HYDROPONICS, INC.

WESTERN U.S. 3135 Kerner Blvd.
3135 Kerner Blvd.
San Rafael, CA 94901
1-800-634-9999

EASTERN U.S. 208 Route 13
208 Route 13
Bristol, PA 19007
1-800-227-4567



GROW WITH THE BEST

NEW! Hydrolite™ Super

The highest quality grow light system made.

- 1000 watt full spectrum clear Super Halide. 125,000 lumens.

Option: Coated bulb, no extra charge.

- **Choose:** 21" or 45" electro-white reflector. Both designed for maximum reflection and even diffusion—feature full range adjustability for all growing situations.

- **Heavy Duty** steel ballast cabinet. Double-wall construction. Watersafe louvered design. Completely pre-wired. UL components.

- **Rugged and dependable** construction you can count on for years to come.

\$199.95 Super



Flowering Lights

HPS 1000

- 140,000 lumen High Pressure Sodium
- 45" adjustable reflector
- louvered HPS ballast

\$264.95



HPS 400 (not shown)

- 50,000 lumens
- 21" reflector

\$189.95



FREE TIMER (\$19.95 value)

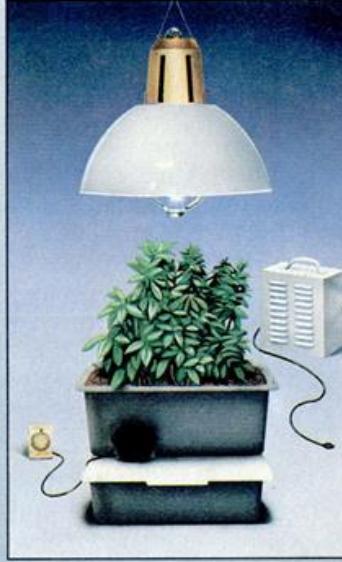
with purchase
of BOTH
Light System
& Hydroponics

◀ See Coupon



Hydrofarm Solo
Same professional-quality automated flush system as our Quad but in a single unit size, 2'x2', includes Geolite, Nutrients, etc.

\$64.95



TOLL FREE 1-800

High Times says:

"Each Hydrofarm Quad is good for a dozen bushy plants. Grow twice as fast, get bigger yields."

- **Improved!** Most popular grower-proven hydroponic system now even better.

- **Automated flush** for more nutrient delivery. 8'x8' as shown. For large multi-system areas, sets up in row, too (3'x9').



- **Geolite™ rock** retains optimum nutrient solution and air between cycles. Anchors plants. Reusable. Ours, exclusively!

- **Nutrients**—Grow and Bloom—specifically blended for each stage of your plant's life. System includes all of above plus growing manual.

\$199.95 Quad



Doubles growth and flowering! Sale **\$149.95**

APPLIED HYDROPOONICS, INC.

WESTERN U.S.—S.F.

3135 Kerner Blvd.
San Rafael, CA 94901

EASTERN U.S.—PHILA.

208 Route 13
Bristol, PA 19007



C.O.D.



Visit our Showrooms

• M-F, 9-5; Sat., 10-5

FREE CATALOG AND PHONE ORDERS

→ 634-9999 • WESTERN U.S.

→ 227-4567 • EASTERN U.S.

SGS INNOVATES



Called
"Dutch Treat"
by *High Times*
indoor growing guide.

Call us
for a free
copy of our
newest catalog.

Here are some
fine SGS products:

Grow Room supplies
Lamps • Fertilizers
Light Track systems • Mylar
Hydroponic supplies • Test kits
Rockwool • CO₂ cylinders
The Gasser CO₂ System



CODs Welcome

Europonic System

In order to bring you the finest growing products, Superior Growers Supply went to Holland to study state-of-the-art hydroponic systems. As a result, SGS developed a nutrient recirculating system designed to use with Rockwool products.

First you start your seeds or root cuttings in Rockwool blocks. These blocks are then placed onto Rockwool growing slabs. Each plant on the Rockwool slab is equipped with an irrigation tube and a 3-position emitter which provides a continuous luxury level of nutrients to the roots of each plant. After feeding the roots, the nutrient solution is recycled back to your reservoir by sturdy, ultraviolet-resistant plastic gutters specially proportioned for Rockwool slabs. A powerful, heavy-duty and chemical resistant pump provides pressure to irrigate up to 24 plants.

This is the first ready-made hydroponic system designed and tested in Holland.

Cost ~~\$199.95~~ \$179.95 (for a limited time only)

SUPERIOR GROWERS SUPPLY, INC.
4870 Dawn Avenue
East Lansing, Michigan 48823
(517) 332-2663

SUPERIOR GROWERS OF ILLINOIS, INC.
1548 Burgundy Pkwy.
Streamwood, Illinois 60103
(312) 830-3311

Toll Free (800) 227-0027

How to vastly improve your growing environment in five easy lessons.

1 Install the best growing system.

Energy Savers has spent years designing the ultimate hydroponic system (patent pending) — one with the features and qualities of a commercial unit at a size and price to suit you.

Our professional-quality growing system is bigger than others currently available, and it's expandable. Each tray is 6' long and 1' wide, which can hold 1 to 15 plants per tray. The hydroponic system allows you to germinate and propagate your plants right in the trays, it automatically waters and feeds plants on whatever schedule you determine, and it even refills itself automatically with water lost through evaporation.

1 unit (Pump tray)	\$230.00
2 units (Pump & satellite tray)	\$365.00
4 units (Pump & 3 satellite trays)	\$620.00
6 units (Pump & 5 satellite trays)	\$899.00



SPECIAL OFFER

<input type="checkbox"/> 2 units, 1 deluxe light MS1000 bulb w/46" reflector plus 1 solar shuttle	Regularly \$663.50
	On Sale \$599.00
<input type="checkbox"/> 4 units, 2 deluxe lights MS1000 bulbs w/46" reflectors plus 2 solar shuttles	Regularly \$1217.00
	On Sale \$1099.00
<input type="checkbox"/> 6 units, 3 deluxe lights MS1000 bulbs w/46" reflectors plus 3 solar shuttles	Regularly \$1794.50
	On Sale \$1639.00

2 Remove the pollutants from the air.

Our Negative Ion Generator by Pulsair uses a back-and-forth emission/collection cycle that makes it extremely effective in removing smoke, dust, pollen and other pollutants from the air. The ions actually kill airborne bacteria and will remove dirt particles as small as 1/1000 micron. Will work in rooms up to 250 sq. ft. \$99.00



3 Use a scientifically blended soil.

For non-hydroponic growing systems, Black Gold is the one soil for all plants. Castings of earthworms are considered the highest grade of compost.

20/20 PLANTING MEDIUM

A multipurpose planting medium for all plants, this nutrient-rich earthworm casting base is formulated with other vital ingredients for maximum plant growth. It contains natural, all organic nutrients plus slow release chemical fertilizer. The mix has excellent aeration for drainage, root development and moisture retention. Sterilized, has a pH of 6.0-6.9.



1 cubic foot (approx. 28#)	\$5.99
1.5 cubic feet (approx. 38#)	\$7.99

ALL ORGANIC PLANTING MEDIUM

This is a 100% organic planting medium for all plants. Containing no chemical fertilizers, it won't cause plant burn or tie up nutrients.

1 cubic foot (approx. 28#)	\$6.99
1.5 cubic feet (approx. 38#)	\$8.99

EARTHWORM CASTINGS

100% organic planting amendment to any soil or pre-mixed potting medium. Mineral-rich, odorless and of a viable consistency for soil mixes, can also be used to top dress existing soil.

20 quart (approx. 27#)	\$13.95
----------------------------------	---------

TRY WONDER WOOL

The newest growing medium - made of molten granite.

2"x2" Grow Cubes	20¢ each
40 lb. bale	\$39.00

4 Ventilate your grow area.

Squirrel cage fans are perfect for providing efficient air evacuation and circulation in your grow area. Units can displace from 50 to 960 cubic feet per minute (cfm) for any application. Can be operated by timer or thermostat, sold below.



50 cfm	\$ 29.95	265 cfm	\$ 69.95
100 cfm	\$ 43.95	435 cfm	\$ 89.95
160 cfm	\$ 54.95	960 cfm	\$159.95
Thermostat Control	\$ 19.95		
Humidistat Control	\$ 34.95		

5 Protect your lighting system and monitor for smoke and fire.

The Surge Survival System and our new Smoke/Fire Detector Module can protect your lighting system from electrical disturbances and your grow room from smoke and fire damage. Avoid expensive repairs caused by electrical surges, brown-outs, electrical storms and lightning strikes.

By electronically monitoring for high and low voltage problems, the Command Module will shut down the lighting system when voltage reaches dangerous levels. Just long enough for bulbs to cool and voltage to stabilize. Then the line voltage is analyzed and the lighting system turned on if voltage is within safe limits. With the optional Smoke/Fire Detection Module, the complete lighting system will be shut down in the presence of smoke or fire.



Remote Modules. Each Remote Module can switch one 1000 watt system at 120 volts or three 1000 watt systems at 240 volts.

Command Module with 1 Remote Module	\$99.00
Additional Remote Modules	\$29.00
Smoke/Fire Detector Module	\$69.00

Introducing a new product:

A perfect reflective surface for your grow area. Mylar, 1 mil. double-sided, 99.9% reflectivity. 4 x 50 foot roll \$29.00
4 x 100 foot roll \$49.00



Energy Savers Unlimited, Inc.
22138 S. Vermont Ave. #C, Torrance, CA 90502

Call Toll Free:

Outside California (800) 421-2994

In California (800) 538-3400

See additional product listing inside front cover.

Prices do not include shipping. One year parts & labor guarantee. 30 day money back guarantee. Most orders shipped in 24 hours. C.O.D. orders welcome. No deposit required. Quantity prices available. Call for free catalog.



THE SECRET OF SUCCESSFUL INDOOR GROWING

the easy Hamilton way...

Grow bigger, healthier plants faster.

PROVEN RESULTS: Metal halide or high pressure sodium lights create the highest intensity, best quality sun's full spectrum - indoors. Fluorescent systems are weak, inefficient and do not give your plants enough light lumens and wattage for good growth.

SAVE MONEY Buy Direct from the Manufacturer!

METAL HALIDE: Best for fast plant growth.

MH 1000 Watt Basic System (Reg. \$182) **\$139.95**
High quality, assembled, QUIET, open ballast; 20' lamp cord; power cord; socket; 110,000 lumen / 12,000 hr. bulb.

MH 1000 Watt Professional System (Reg. \$210) **\$165.95**
18" Dome (for HORIZONTAL reflector or 48" PARABOLIC add \$4.95). High quality, assembled, QUIET, ventilated ballast box; 20' lamp cord; 110,000 lumen / 12,000 hr. bulb.

MH 1000 Watt Deluxe System (Reg. \$238) **\$179.95**
Choice of: HORIZONTAL reflector, 48" PARABOLIC, 46", 22" adjustable Dome. High quality, assembled, QUIET, ventilated ballast box with GROUNDED 6-OUTLET, ON-OFF CONTROL, 15 AMP. PROTECTIVE CIRCUIT BREAKER; 20' lamp cord; 110,000 lumen / 12,000 hr. bulb.

MS 1000 SUPER BULB brightest bulb; 125,000 lumen / 12,000 hrs. add **\$14.00**

MH 400 Watt Professional System (Reg. \$151) **\$124.50**
18" Dome (for HORIZONTAL reflector or 48" PARABOLIC add \$4.95). High quality, assembled, QUIET, ventilated ballast box; 20' lamp cord; 34,000 lumen / 20,000 hr. bulb.

MH 400 Watt Deluxe System (Reg. \$162) **\$134.50**
18" Dome (for HORIZONTAL reflector or 48" PARABOLIC add \$4.95). High quality, assembled, QUIET, ventilated ballast box with grounded 6-outlet, on-off control; protective 15 amp circuit breaker; 20' lamp cord; 34,000 lumen / 20,000 hr. bulb.

MS 400 SUPER BULB-brightest bulb; 40,000 lumen / 20,000 hrs. add **\$10.00**

HIGH PRESSURE SODIUM: Increases budding & flowering

HPS 1000 Watt Deluxe System (Reg. \$317) **\$255.95**
Choice of: HORIZONTAL reflector, 48" PARABOLIC, 46", or 22" adjustable Dome. High quality, assembled, QUIET, ventilated ballast box; 20' lamp cord; 5KV socket; 140,000 lumen / 24,000 hrs. bulb.

HPS 400 Watt Deluxe System (Reg. \$215) **\$184.95**
18" Dome (for HORIZONTAL reflector or 48" PARABOLIC add \$4.95). High quality, assembled, QUIET, ventilated ballast box; 20' lamp cord; 50,000 lumen / 24,000 hr. bulb.

LIGHT MOVERS: More light coverage to grow more plants.

Motorized Lite Track™ - Double your light coverage **\$97.95**
Best single light mover; 6' track (EXTENDER available for second light) \$38.95.

Sun Circle™ - Increases flowering by a blend of MH&HPS .. **\$194.95**
Two lights rotate continuously in full circle; greatest coverage.

Whirligig™ - Eliminates hot and dark spots **\$114.95**
Two lights move back & forth in a circular pattern.

HYDROPONICS: Our customers say their plant yields are three times greater and two times faster with Hamilton's automated "flood/drain" HYDROPRO system. Roots are provided maximum direct nutrition and aeration without soil.

HYDROPRO SINGLE™: Ideal up to 4 plants; 2' x 2' area **\$59.95**
Includes: pump, grow & bloom nutrients, timer, pH test kit, Jiffy 7, manual, etc.

HYDROPRO 4™: Grow up to 16 plants; 3' x 9' or 8' x 8' **\$187.95**
Includes submersible pump, grow & bloom nutrients, timer, manual and more.

CO₂ ENRICHMENT SYSTEM: Increase growth by 40% .. **\$137.95**

ION GENERATORS: Clean growing area of smoke, pollen & pollutants.
AirEase Ion **\$49.50** **Pulsair:** generates 300% more ions **\$96.50**

DIGITAL pH PEN: Instant accurate readings (Reg. \$97) **\$69.95**

NEW HPS BULBS - That work in metal halide systems!
1000 watt **\$137.50** 400 watt **\$67.50**

ROCKWOOL, REPLACEMENT BULBS, MYLAR, etc... Call for Price

FREE INDOOR GARDENING BOOKLET
with any system purchased

Why Hamilton's Customers are Satisfied:

- Highest quality products at lowest prices.
- Large inventory with shipment in 24 hours.
- Reliable service and 2 yr. guarantee (bulbs 1 yr.).
- 30 day money back guarantee.
- Fast C.O.D. delivery by U.P.S. - anywhere.



FREE TIMER with any hydroponics

Visit our Los Angeles showroom.

HAMILTON TECHNOLOGY CORP.

14902 S. Figueroa Street, Gardena, CA 90248

ORDER TOLL FREE:

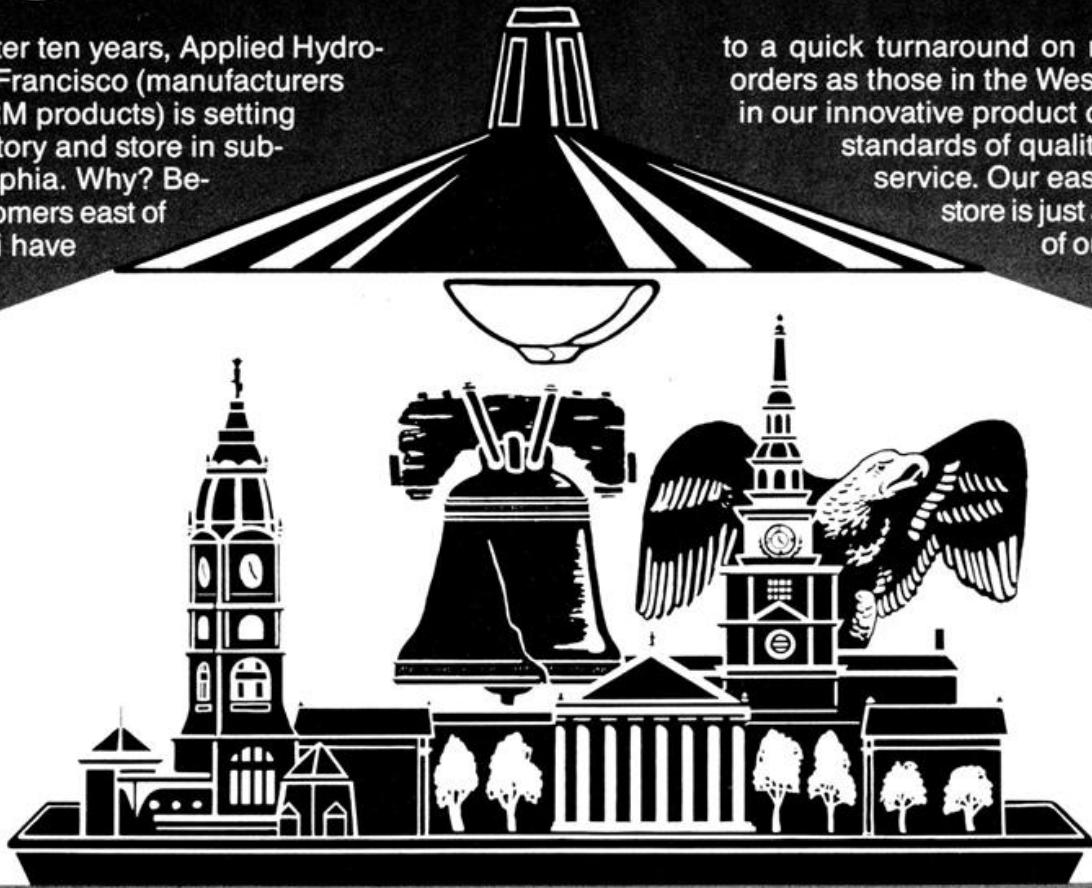
(800) 458-7474

(800) 635-3344 (in California)

Philadelphia. Home of soft pretzels, hoagies & HYDROFARM.

That's right! After ten years, Applied Hydroponics of San Francisco (manufacturers of HYDROFARM products) is setting up another factory and store in suburban Philadelphia. Why? Because our customers east of the Mississippi have just as much right

to a quick turnaround on mail and phone orders as those in the West. We take pride in our innovative product design, our high standards of quality, and our great service. Our eastern factory and store is just another example of our determination to serve you well.



GRAND OPENING GIVEAWAY

With every purchase of HYDROFARM products we're giving away a copy of *MEGACROP*, the latest book on increasing your yield.

This offer is available in all authorized retail outlets as well as through phone and mail orders.



Applied Hydroponics - S.F.
3135 Kerner Blvd.
San Rafael, CA 94901
Toll free 1-800-634-9999

Applied Hydroponics - Phila.
208 Route 13
Bristol, PA 19007
Toll free 1-800-227-4567

If you live in the Northeast and prefer to come into the store, you'll appreciate our new retail outlet at the crossroads of I-95 and the Pennsylvania Turnpike. All our authorized retailers are listed below and in more detail on page 8.

AUTHORIZED RETAILERS



For more product information,
see our ads on page 8 & 9.

LETTERS

continued from page 6

nightmare about their own children. Are you trying to win cultural and social acceptance for drug users, or to simply reinforce a popular image we have already suffered from long enough?

May I suggest that you try and keep such self-indulgent pieces of juvenile debasement out of your pages in the future? It is divisive and degrading for me to see my culture portrayed in this fashion. We don't want this and we don't need this. If this article in your magazine was someone's idea of an attempt at humor, then it was cute, but still largely tasteless and stupid. This article was not an example of the entire drug culture of America.

—A new patriot in Illinois

We think you missed the point.

I can't believe you guys actually published those features about partying in your August issue. The reason I purchased a subscription to HIGH TIMES was because I found your magazine to be informative, humorous and intelligently done. Those two features were none of the above. I thought your purpose was to write about the safer drugs. Yet you actually encouraged people to use alcohol, the drug that does the most harm to our society. Don't you fuckers know the Alcohol Board encouraged the criminalization of marijuana in the late '30s when they found that pot smokers tended to consume less alcohol?

—Get stoned, not drunk,
Brandon, Manitoba, Canada

PISSED OFF ABOUT PISS TESTS

Greetings. I would like to see a section in this magazine listing employers that give piss tests. Such a listing could be compiled from many sources, including HIGH TIMES' readers, and would be valuable in helping people like me determine which products and services not to buy and where not to invest or apply for work. May I start this list with Atlantic Richfield Co., Standard Oil, and the Anchorage Times?

—Pissed off,
Anchorage, Alaska



J.D. KING

SPECIAL FLOYD ISSUE?

Well it's been quite some time, but Floyd has finally put out a new album, minus Pink, unfortunately (not to mention the lawsuit). HIGH TIMES must dedicate an issue to them. This being the 20th anniversary of the "Summer of Love," what would it be without a "Floyd" issue of the "Times." Am I right?

C'mon, be fearless. Do one. Please.
—Bob Holt,
Springfield, Massachusetts

DOPERS MUST VOTE!

The thing that really pisses me off is dopers who don't vote. If all the potheads in this country would get off their asses and register to vote, write a letter to their congressmen, and then vote, possession and cultivation would be legal in most states in no time at all.

—Burl,
Colorado Springs, Colorado

CONTRA REPORT

Now that the Contra hearings (which were a whitewash television series) are over, where's HIGH TIMES' overview? Or is HIGH TIMES following the leads of the far right and now all is forgiven and

forgotten. Where's your story telling us righteous HIGH TIMERS about Ollie's plan to abolish the Constitution (on this 200th birthday of its origination)? How hypocritical has it gotten when even HIGH TIMES doesn't follow up drug-smuggling Contras?

—Romanyshyn,
Pomona, California

We published a book excerpt on "America's Secret Team" that detailed covert operations in the Reagan era way back in the September issue. And, as this issue goes to press, the Iran/Contra hearings have just ended. Joel Millman's report begins on page 42.

REEFER MADNESS

Recently, there has been an upsurge in anti-marijuana propaganda in the media, especially on television, which I call "Reefer Madness, Part II." Some of the effects attributable to marijuana are premature senility, an incidence of lung cancer 40 to 50 percent higher than tobacco smokers, irregular menstrual periods, an increase in fetal loss, stillbirths and infants that tend to be undersized and hyperactive.

Could you please print the latest unbiased scientific findings on the effects of pot, or if you have done so recently, please let me know what issue? Thank you.

—Taylor Holmes,
Lawaii, Hawaii

Turn to page 32 of this issue.

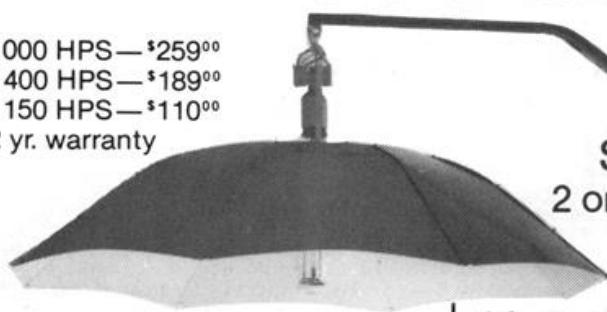
FIGHT FOR YOUR RIGHTS!

It's time to fight for your rights. Vote, yes, vote these bozos out of office. I'm sick of these assholes who don't even realize their war on drugs hurts innocent people and gives more power to organized crime. I don't know about you, but I do not want to see any more people go to jail for smoking grass. It's fucking crazy and it has to stop. Period. And when people say my vote won't count, bullshit. At last report there are 30 million cannabis users in the U.S. Even if ten percent of us vote, we can turn this thing around. So get out there and vote. And when I'm in that booth, before I pull the lever, I say, "Bend over Koch/Reagan/Meese—it's your turn!"

—A mover and shaker,
Staten Island, New York

DANSCO INDOOR GARDEN CENTERS

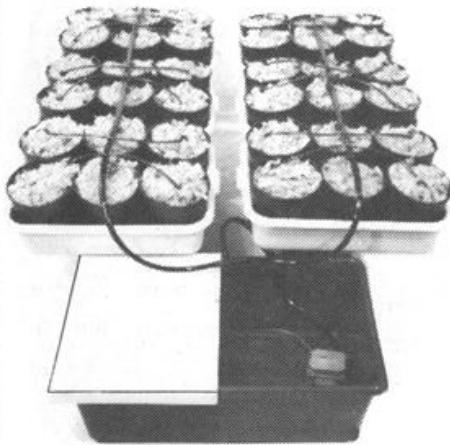
1000 HPS—\$259⁰⁰
 400 HPS—\$189⁰⁰
 150 HPS—\$110⁰⁰
 2 yr. warranty



HYDRO FLO I \$265⁰⁰
 Expansion Module \$16⁰⁰

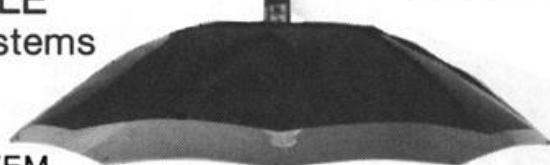
NEW Hydro Flo I includes 6 trays with 36 one gallon Pyramid pots, reservoir, timer, pump, rockwool, 12 week supply of General Hydroponics nutrients with pH Control Kit and filter. Basic system covers 4'x5' area for 6-8 week cycle. Double the size of this system for only \$96 more!

Larger pumps and reservoirs allow us to custom fit these systems to your needs.



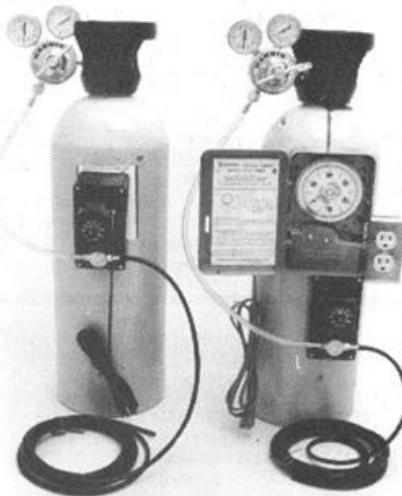
SUN CIRCLE 2 or 3 Light Systems

1000 MH—\$199⁰⁰
 400 MH—\$149⁰⁰
 175 MH—\$110⁰⁰
 2 yr. warranty



CO₂ INJECTION SYSTEM
 \$179⁰⁰
 with Exhaust Control \$279⁰⁰
 Basic injection system includes a heavy duty brass body regulator, brass solenoid valve, pre-wired solid state recycle timer, hose and fittings.

Exhaust control and CO₂ injection are synchronized by using a second recycle timer which becomes the primary controller. The system is completely wired with dual outlets for exhaust and intake fans.

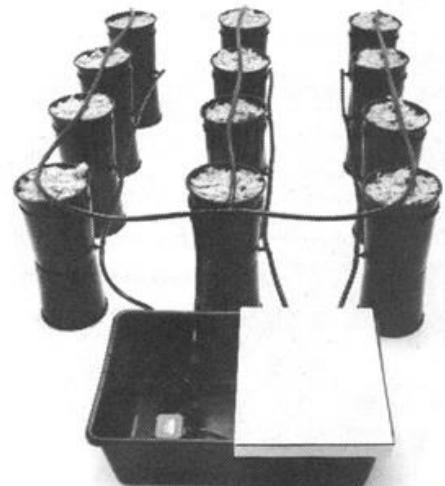


Tanks (not included)

HYDRO CELL II \$250⁰⁰
 Expansion Module \$6⁰⁰

Hydro Cell II includes 12 two gallon grow cells with reservoir, timer, pump, rockwool, 12 week supply of General Hydroponics nutrients with pH Control Kit and filter. Recirculating system is easily expandable to 36 cells without increasing pump size. Our 25 gallon reservoir should be used with more than 12 cells.

Larger pumps and reservoirs allow us to custom fit these systems to your needs.



MH to HPS conversion lamps • 4' and 7' parabolic reflectors • light rails and tracks • horizontal mount light fixtures • guaranteed air filtration systems • ion generators • deodorizers • CO₂ generators • CO₂ injection systems • circulating fans • exhaust fans • inflatable exhaust tubing • dehumidifiers • timers (24 hr., multiple program, repeat cycle) • water timers • vinyl tubing • drip irrigation • hydro nutrients • pumps • nutrient heaters • pH pens • dissolved salts pens • temperature & humidity meters and controllers • scales • propagation mats • heating cables • rockwool cubes • rootcubes • new "root pruning" pots • clone domes • Pro-mix • Sunshine mix • loose rockwool • Gro-rox • bat guano • kelp • plant hormones • cloning aids • pH balancers • bloom boosters • 99% reflective mylar • white visqueen • greenhouses and accessories

DANSCO VALLEY HALIDE
 E. 14109 Sprague #5
 Spokane WA 99216
 509-924-8333
 800-527-7012 Ext. 294 ← orders only → 800-345-3398 ← orders only

DANSCO HALIDE
 315 North 105th
 Seattle WA 98133
 206-784-9492
 800-345-3398 ← orders only

DANSCO INDOOR GARDEN CENTER
 844 University Avenue
 Berkeley CA 94710
 415-549-2918
 800-523-1367

Dealer Inquiries: DANSCO DISTRIBUTORS, 4442 27th W, Seattle WA 98199, 206-282-7282

VISA, MC, AMEX or will COD with prepaid freight.

PHOTOTRON®

PIONEERS IN THE MODERN ERA OF RESEARCH ON THE MINERAL NUTRITION OF PLANTS...ONE OF THEM WILL CHANGE YOUR LIFE



LUTHER BURBANK lived from 1849 to 1926, and not before or since has there been a greater contributor to plant development. Every domesticated fruit or vegetable or flower has been produced by Mr. Burbank directly or by his methodology.

Mr. Burbank's methodology was extremely simple: (1) First he would GATHER the most extensive seed stock of a particular species from all over the world. (2) Then he would PLANT all of the seeds closely together. From the resulting ten thousand plants, he would (3) SELECT one or two that had the most pronounced characteristic of size or shape or scent or color or whatever he was looking for. (4) From those one or two plants, all of the seeds were PLANTED and from the resulting ten thousand plants, only one or two would be (5) SELECTED that further developed more of the desired characteristic. This process of planting and selection would be repeated as often as necessary from a few generations to hundreds of generations until Mr. Burbank would release the final seed stock to the rest of the world.

Mr. Burbank grafted one hundred different types of apple branches onto a single apple tree and each branch bore a completely different fruit the first year for his personal selection. Inventing this grafting technique, he squeezed thousands of years of research into a few. The results of his work, from potatoes to apples to EVERY domesticated fruit, vegetable or flower, are what we grow today.

The Burbank Potatoe Quadrupled World Production in One Year. Luther Burbank never needed a lot of space. In his lifetime he conducted over one hundred thousand series of experiments and changed the world on less than three acres of land.



DENNIS ROBERT HOAGLAND, 1888-1949, was the inventor of the "four salt Hoagland solution" from which all HYDROPONICS are based. Although a brilliant botanist, Dr. Hoagland was interested in only one thing, the BIO-MASS (size and weight) of the TOMATO produced hydroponically. Working under the scientific assumptions of the early 1900s, Dr. Hoagland's world assumed four things:

A. Plants had a life cycle leading to death. WE NOW KNOW plants have a very different way of achieving a life and death cycle than does the human being. Humans are more genetically structured toward their life and death cycle than plants. Plants allow environmental factors to control not only their life and death cycle but their sex as well: Such things as (1) "PHOTO-PERIOD" (length of time under light and dark), (2) "THERMO-PERIOD" (length of time under temperature variation), and most importantly (3) "NUTRIENT PERIOD" (length of time under a given nutrient configuration).

B. Maximum SIZE and WEIGHT before death of (a) root, (b) shoot, (c) fruit—known as the "root to shoot to fruit ratio"—was the absolute goal. WE NOW KNOW the "root to shoot to fruit ratio" is a fallacy. There is no such thing. While keeping the fruit exactly the same size as normal, both the root (below the soil) and the shoot (above the soil) can be minimized. And by reducing the inter-nodal lengths* (distance between the budding sites from an average of 6 inches to less than 1 inch), the number of the normal sized fruit will increase to thousands per plant. (*Footnote: See inter-nodal length graph in "The Garden" brochure.)

C. Plant "lush feeding" of excess nutrients meant nothing. WE NOW KNOW plant "lush feeding" kills the plant. The basis of the hydroponic method is that a fresh nutrient supply be pumped in while the used nutrient supply drains out. This allows the plant to absorb excess amounts of calcium. If allowed, the plant will absorb 10 times what it requires of calcium to the exclusion of other more beneficial nutrients like N, P, K, Mg, Na, Cl, etc. Too much calcium and the plant gets GARDENING OF THE ARTERIES and dies after one seasonal growth period.

D. An aqueous (water) based system without a "buffer" (soil having a cation exchange capacity, C.E.C.) was best. WE NOW KNOW an aqueous (water) based nutrient solution surrounding the root system without a "buffer" to protect the roots creates a "water root"—a thick, fleshy root that has layered itself with "fat" to protect itself. Nowhere near the amount of root surface area is produced hydroponically (water based) as when the roots are buffered against excess concentrations by a soil medium.

WE NOW KNOW that the soil mediums used by Dr. Hoagland, such as perlite vermiculite, and sand have no buffering action or "CATION EXCHANGE CAPACITY" (C.E.C.). The CATION EXCHANGE CAPACITY of a soil medium is the ability of that medium to ABSORB AND RELEASE a nutrient solution. The cation exchange capacity of the soil medium protects the root system and allows it to produce thousands more root structures, producing thousands more square inches of root surface area. The greater the root surface area, the more efficient the nutrient uptake for faster growth.

The early 1900s did not have the advanced technology of 1986. Equipment for testing nutrient solutions and plant tissue such as the gas-liquid chromatographic assay (GLC), Thin-Layer chromatographic assay (TLC) and sophisticated atomic absorption equipment were not available.

With the aid of the computer since 1951, the medical profession by comparison has advanced in the last 30 years more than in the preceding 2,000 years. If Dennis Robert Hoagland had access to 1986 technology in 1920, he never would have designed the hydroponic system.



JEFFERY JULIAN DEMARCO, 1951—, is President and founder of PYRAPONIC INDUSTRIES and is the inventor of the methodology known as GROWING PLANTS PYRAPONIMETRICALLY and the PHOTOTRON.

Three things are required to grow plants pyraponimetrically: 1. A laboratory grade growth chamber known as the PHOTOTRON. 2. A specific METHODOLOGY for plant growth and manipulation (instructions). 3. A very specific NUTRIENT SUPPLY COMPUTER DESIGNED IN PARTS PER MILLION (PPM) for each individual PHOTOTRON. The exact nutrient calibrations are individually calibrated based upon two soil samples taken from the phototron: one after FORTY-FIVE DAYS of plant growth and one after 90 DAYS of plant growth—ONLY TWO ARE REQUIRED.

Mr. DeMarco's Masters thesis was on the cannabinoid profile of marijuana. After working under both federal and state license in a laboratory at a major university for over two years, and since 1976 has developed the phototron, the methodology and the chemistry to study the internal workings of the plant (not just the SIZE and WEIGHT, but utmostly important to study the MOLECULAR and PHARMACOLOGIC properties of the plant). The research developed in pursuit of Mr. DeMarco's

research PERTAINS TO ANY PLANT.

Pharmacognosy is the study of molecules produced inside plants. This type of study requires very sophisticated equipment like the Gas-Liquid Chromatogram (GLC), Thin-Layer Chromatogram (TLC) and Atomic Absorption.

THC-delta 9, the psychoactive molecule produced by the marijuana plant, is so microscopic that 100,000 molecules fit end to end would sit on the head of a pin. When you're concerned about growing structures so infinitely tiny, what difference does the size of the plant make?

In the disciplines of Botany, Horticulture, Plant Physiology, Soil Chemistry and Floraculture, a "root to shoot to fruit" ratio requires a large root and a large shoot to grow large fruit.

Growing plants Pyraponimetrically (by exactly measuring all 21 environmental elements), requires the plant to produce minimal root, minimal shoot (inter-nodal lengths) and maximize the number of budding sites and size of the bud, flower or fruit.

To develop the (A) PHOTOTRON, (B) the CHEMISTRY and (C) the plant manipulation methodology known as GROWING PLANTS PYRAPONIMETRICALLY, the marijuana plant was used because of its unique properties.

The PHOTOTRON was designed to: (1) GROW 6 PLANTS THREE AND ONE-HALF FEET TALL IN 45 DAYS; (2) Duplicate exactly the quality of the plant material the seed came from; (3) RE-FLOWER AND RE-BUD PLANT MATERIAL EVERY 45 DAYS UP TO 9 TIMES PER YEAR; (4) NEVER KILLING THE PLANTS, YEAR AFTER YEAR; (5) BE REMOVED FROM EVERY DAY. (The system is designed for plant removal, not containment); and (6) To produce 6-8 ounces of plant material every 45 days.

Growing Plants Pyraponimetrically will revolutionize indoor plant production as we know it today. At PYRAPONIC LABORATORIES, over 25 PHOTOTRONS are used for new experiments. To date, PYRAPONIC LABORATORIES have successfully catalogued 17 varieties of flowering plants, 14 varieties of fruits and vegetables, 8 varieties of tobacco and will force flower roses 365 days per year.

A year, or two years from now, PYRAPONIC INDUSTRIES will mass market the PHOTOTRON through the major retailers, on television and radio. I will look forward to working with you. Thank you very much.

Jeffery Julian DeMarco
President and Founder Pyraponic Industries

1-312-544- B-U-D-S

OVER 15,000 PHOTOTRONS SOLD WORLDWIDE - INTRODUCING THE

PHOTOTRON 2

HAWAII VS THE PHOTOTRON

Hello, my name is Jeffery Demarco, President and Founder of PYRAPONIC INDUSTRIES.

My master's thesis is on the cannabinoid profile of marijuana. I tell you this for historical footnote only.

In pursuit of my own master's thesis, I generated the most extensive popular literature library in the world. Then, I generated the most extensive scientific bibliography in the world. I then went into a laboratory under Federal license at a major university in which I designed a laboratory grade growth chamber called the PHOTOTRON.

If you read all of the popular literature: I did. All of the scientific literature: I did. And look at every apparatus that is in High Times, you will find one common denominator. Every system, UP TILL NOW, has attempted to re-create Hawaii. I suggest that when you finally achieve the re-creation of Hawaii, you can do NO BETTER than Hawaii's results. AND WHAT ARE HAWAII'S RESULTS?

In fact, you will grow the plant 6 to 9 months, 6 to 12 feet tall. In fact, you will average a 6-inch internodal length (distance between budding sites). In fact, have a 10% budding ratio at the tops of the plant. In fact, throw away 90% of the plant material (leaves/shake). And in fact, YOU MUST START ALL OVER AGAIN.

Look. The only thing I'm waiting nine months for is a baby, number one. Number two, I do not want a tree in my house. And number three, I am not going to pay the ELECTRIC BILL TO PRODUCE THE SUN somewhere in my closet. Do not let its pretty looks fool you. Do not let its size (3½ feet tall x 18 inches wide) fool you. Do not let its weight at 17 lbs. fool you.

The PHOTOTRON will draw \$4.00 per month in electricity (average). My system is totally different.

In fact, you will grow 6 plants three and one half feet tall in 45 days, guaranteed. You will maintain a one-inch internodal length, guaranteed. That each plant will produce 1,000 budding sites, FROM TOP TO BOTTOM, guaranteed. And there will be 6 plants per individual PHOTOTRON, guaranteed.

And this is the only system in the world where you can re-flower and re-bud the exact same plants every 45 days, up to nine times per year without killing them off. EVER. Then, you may re-flower and re-bud the exact same plants every 45 days up to nine times per year while you remove from the system every single solitary day. Every day (average 6-8 oz. every 45 days). You remove from the PHOTOTRON every single solitary day, beginning on day 20 from seed germination.

I, personally, guarantee and service back the PHOTOTRON, so do not let its technical nature throw you. You will require THREE PAGES OF INSTRUCTIONS ONLY. Because the system is TOTALLY COMPLETE. You will do three things: 1. Select your seed. 2. Plug the system in. 3. Water it.

Then, if you have any questions at all, you may call me direct. Ask your question. Get your answer. And carry on about your business. You cannot fail with my PHOTOTRON. I do not allow any of my PHOTOTRONS to fall below SHOW-CASE. I have personally guaranteed every PHOTOTRON that has ever been sold. And I have never had one returned. I am not starting now.

"If you do not learn more about plant production than you have ever learned before, I will pay you for the call."

Jeffery Julian De Marco



THE PHOTOTRON		None	24	Yes								
Halide Systems		50%	1	No								
LIGHT	LEAF SELF SHADING LINEAR FEET OF LIGHT SPECTRUM ADJUSTABILITY COMPUTER DESIGNED FOR EACH SYSTEM GUARANTEE FEMALE SEX NEVER KILLS THE PLANTS ONE-INCH INTERNODAL LENGTHS = 1,000 BUDDING SITES PER PLANT RE-FLOWER AND RE-BUD SAME PLANTS/EVERY 45 DAYS UP TO 9 TIMES PER YEAR TOTALLY SELF-SUFFICIENT TO LEAF SATURATION SERVICE HOT LINE FOR QUESTIONS											
NUTRIENTS												
CO ₂												
SERVICE												

If you do not learn more about plant production than you have ever learned before, we will pay you for the call. CAN YOU AFFORD NOT TO CALL US. Or, send a \$3.00 money order for our brochure, "THE GARDEN-GROWING PLANTS PYRAPONIMENTRICALLY" to:

PYRAPONIC INDUSTRIES, INC², P.O. BOX 1071, MELROSE PARK, IL 60160

* photograph presented from university conducted research for Masters Thesis entitled "Factors Controlling Resin-Production and Plant Growth," pertaining to any plant.

1-312-544-B-U-D-S

PYRAPONIC LABORATORIES: GROWING PLANTS PYRAPONIMETRICALLY

PYRAPONIC LABORATORIES MAINTAINS: (1) The most extensive scientific literature library in the world. (2) The most extensive popular literature in the world. (3) The most extensive library of Data Packages and Soil Analysis selected from over 3,000 PHOTOTRONS sold worldwide. (4) On premises, over 25 PHOTOTRONS with the capacity of three shelves each so that up to 75 experiments may be ongoing at any one time. Jeffery Julian DeMarco, President and Founder of PYRAPONIC INDUSTRIES and PYRAPONIC LABORATORIES, maintains his PHOTOTRONS for the purpose of killing plants. It is only after experimenting with the parameters of death at PYRAPONIC LABORATORIES that the PHOTOTRON can perform so miraculously around the world. Said to be the number 1 herbicidal maniac, Mr. DeMarco has full-time laboratory technicians on staff and has the most extensive technical consulting network from Universities around the world. PYRAPONIC LABORATORIES maintains the most sophisticated on-premises computerization for data analysis and retrieval in the world. Thousands of experiments have been conducted and thousands more will be ongoing to expand ever further the performance of each PHOTOTRON. As PYRAPONIC LABORATORIES introduces new methods or nutrient formulations, each PHOTOTRON owner is contacted so that every PHOTOTRON is upgraded long after it has been purchased.

THE PHOTOTRON IMPROVES MORE AND MORE THE LONGER YOU OWN IT!

GROWTH PATTERN OF TOMATOES GROWN PYRAPONIMETRICALLY



Young tomato plants in vegetative stage.



Young tomato plants beginning to flower and fruit.



Fruiting less than an inch apart.



"Normal" fruit development with a reduced root-to-shoot ratio.

GROWTH PATTERN OF CUCUMBERS GROWN PYRAPONIMETRICALLY



Typical testing pattern by Pyra-Plants near top of Phototron depicting the in less than 30 days. morphological differences of cucumbers grown under identical conditions except one nutrient level.



Plants filling the Phototron in less than 45 days.



Tremendous flowering and fruiting less than an inch apart.



"Normal" fruit development with a reduced root-to-shoot ratio.

HERBS, VEGETABLES AND FLOWERS GROWN PYRAPONIMETRICALLY



Herbal garden at 65 days of Parsley, Sage, Basil, Oregano, Thyme and Chive.



The hottest jalapa pepper grown anywhere in the world.



Laboratory experiment producing complete root systems on the stem structures of flowering marigolds.



"Normal" marigold flower size produced with reduced root-to-shoot ratio.

GROWTH PATTERNS OF ZINIAS AND SNAPDRAGONS GROWN PYRAPONIMETRICALLY



Day 44: Phototron jammed with flowering zinias.



Day 52: "Normal" zinia flower size produced with reduced root-to-shoot ratio.



Day 46: Phototron jammed with flowering snapdragons.



Day 58: "Normal" snapdragon flower size produced with reduced root-to-shoot ratio.



COKEHEAD COPS TERRORIZE TOWN

"It's frightening. If a cop stopped me in the middle of the night, I wouldn't open my door to him," said a Clarkstown, New York, businesswoman.

"There's almost no supervision in the department," admitted a high-ranking, law-enforcement source. "From midnight to 8:00 AM on the graveyard shift, half the department could be coked up."

"We need a change in the department now," said Clarkstown supervisor Charles Holbrook. "It's gotten beyond control. People in this town are saying, 'What the hell is going on?'"

These are just a few of the sensational charges that were leveled against the police department of Clarkstown in Rockland County in a front-page story in the August 5th edition of the NEW YORK POST. Following a number of

brutality and misconduct charges that have many Clarkstown citizens petrified with fear of their supposed protectors of the law, the POST charged that at least ten percent of the police force is on coke.

The Clarkstown Police Department is the second highest-paid police force in the nation and is under investigation by the FBI. The cop/coke-sniffing connection was exposed when ex-Clarkstown police officer Aldo DelRosario, convicted of selling coke, named 14 policemen as coke users. DelRosario passed a lie detector test.

Three of the cops admitted to having a drug problem and are undergoing counseling. The others were given drug tests. Because cocaine traces can disappear after only two days, and because the tests were given two days after charges were

made, the tests may not prove anything.

Some of the scandals that led to the drug charges include a detective who was arrested and charged with offering to fix women's cases in exchange for sex, and a white lieutenant who got one to three years in the slammer for firing shots at a black shoplifting suspect and then ordering his fellow officers to doctor the reports to make it look like self-defense.

After the POST story broke, the second highest cop on the Clarkstown police force, Captain Ronald Fabiz (who had made a racial slur in a threat to a black judge), resigned. Ervin Murfee, head of the Spring Valley NAACP, hailed the resignation. "It's a grave situation when a police officer of his caliber can threaten a judge and assistant DA," he said. ●

CPMC NIXES COMIX

Taking its cue from the PMRC, a new parents group called Concerned Parents Monitoring Comics (CPMC), has condemned certain comic strips, claiming they promote violence, cruelty to animals, "sick" humor, antisocial behavior and a lack of respect for authority. CPMC spokesman, the Reverend Brian Kirk, stated, "We think comics should present positive situations and not confuse children. A lot of comic strips are a bad influence."

On the CPMC "Top 10 Hit List" are such favorites as "Dennis the Menace," "Hagar the

COMIC STRIPS
SHOULD NOT
BE FUNNY



Horrible," "Doonesbury," "The Amazing Spiderman," "The Far Side," "Voodoo Banana," "Life in Hell," "Frank and Ernest," "Bloom County," and "The Born Loser."

Apparently "Dennis the Menace" is one of the group's primary targets. "There's a lot of youthful disrespect for authority in the strip," Kirk admonished. "I don't think it's a good influence on children."

Hank Ketchum, Dennis' creator, answered, "Isn't that a pity. Dennis is an all-American kid. He's like all five year olds." ●

VICTORY IN THE WAR FOR DRUGS

The National Federation of Parents for A Drug Free Youth (NFP), Nancy Reagan's pet antidrug group, is on the brink of financial disaster, according to well-placed sources, and may go under at any time.

Problems for the NFP began last December, when president Joyce Nalepka was fired during a hastily called board conference. Apparently Ms. Nalepka was a very bad administrator, and turned off many allies the group was attempting to reach. Soon after Nalepka was canned, Carolyn Burns, the vice-president, also left under mysterious circumstances. Perhaps the biggest indication that the group is in serious trouble came when they cancelled their national conference. The final nail in the coffin might have been when they missed the filing deadline for their lawsuit against the medical use of marijuana, their pet project.

According to NORML director John Gettman, "You can safely say the organization is in disarray, and that there are obvious signs of it." The NFP are, or were one of NORML's biggest opponents in the fight to legalize pot.

A former NORML employee said that the NFP used a phony membership list to increase its status, was a front for the government and was propped up by government funding. The fact that it's falling apart at the seams since funding cutbacks seems to support this claim.

Although it's too early to tell if this is the beginning of a trend against antidrug pressure groups, it's still a good indication that the public-at-large really doesn't care one way or the other if pot is legal or not. ●

FEDERAL INTERFERENCE IN OREGON'S POT VOTE

by Paul Stanford

Oregon voted on November 6, 1986 on whether to allow adults over 18 year of age to grow marijuana for their personal use or not. The outcome of Oregon's Ballot Measure #5 was 74 percent against, and 26 percent in favor. However, the federal government had interfered in the Oregon election to an unprecedented degree. There is suspicion that the entire "War on Drugs" hysteria that our nation's politicians raged about during "Election-Mania 1986" was engineered by the White House to sway the Oregon election.

In the summer of 1987, the National Organization for the Reform of Marijuana Laws has bypassed the Justice Department and gone directly to U.S. Judge Aubrey Robertson, asking the court to give information directly to a grand jury foreman who can decide if the federal government violated the law by actively campaigning in an Oregon election. The Hatch Act prohibits nonelected, federal officials from engaging in partisan politics in their official capacity.

continued on page 24



Football is a lame sport. It disables many of the players who play professionally, and every year, young kids die from playing it. Most NFL players have to be shot up with painkillers to make it on to the field, and many use steroids to build their bodies up into huge slabs of muscle. Yet, if a football player gets caught taking an unauthorized painkiller, like cocaine, the media has a field day.

"From very early on, the Giants knew who on the team was into drugs. They certainly knew I was, because they let me know. I have a friend whose brother is a lawyer who works closely with law enforcement. Through my friend, I had word passed—from the police—they knew what I was doing. I used to get followed—to bars, to parties and from practices and games. Cops and NFL security people I knew would follow me. This wasn't surveillance—and it was a joke.... If they wanted to bust me, fine. But I knew they weren't going to do that, not as long as I was who I was and my game was intact."

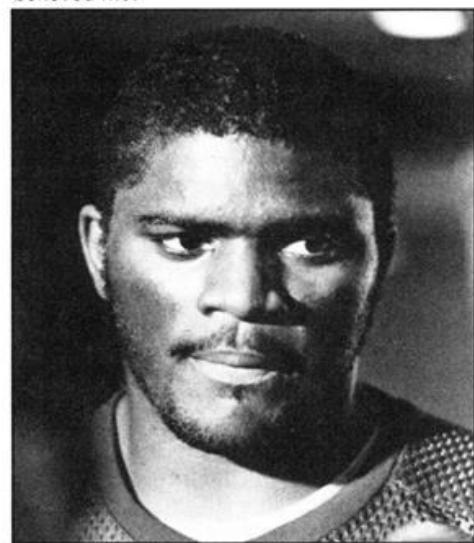
Those words, excerpted in SPORT magazine from New York Giant Lawrence Taylor's autobiography, *LT: Living on the Edge*, didn't have the effect Taylor expected. Instead of revealing the hypocrisy of the drug policy in the NFL, it got the general public up in arms about athletes still doing drugs, and it got the media indignant that a role model would take drugs. LT was able to pass mandatory drug tests using teammates urine, even though he was strung out on crack. This should have proven to the media and the public that mandatory drug tests are a joke. Instead, LT was attacked for "trying to make a buck" off his scandal.

LT criticized the "Just Say No" campaign, writing, "Cocaine was illegal, that was true. I wasn't supposed to be doing it. There was this and that campaign against it, every politician, police chief and Nancy Reagan were against it—but hell, with a guy like me, that almost made it more attractive. Tell me no, and I'll argue and fight you—just to be different."

Baseball's drug policy is just as stupid. Right after the Lawrence Taylor book came out, Kansas City Royal outfielder Lonnie Smith blew the whistle on the selective enforcement of major league baseball's drug policy. "It's not fair," Smith said in a published report. "Look at

Gooden. He doesn't have to pay nothing. Where's the justice? Is it okay just because he's a Cy Young winner? They say they'll suspend him if they catch him one more time, but I never got a second chance. We got guys in this game that have been caught two or three times and nothing's ever happened."

Smith, along with six other major league players, testified in the 1985 drug trial of Philadelphia clubhouse caterer Curtis Strong and received the maximum penalty from Baseball Commissioner Peter Ueberroth. Smith was required to pay \$85,000 to a drug abuse prevention program, perform 100 hours of community service in each of the next two years, and submit to random drug tests for the rest of his major league career. Smith said he paid \$42,000 of his fine, but that no one bothered to tell him when he should pay the rest. He also said he performed his 100 hours of community service, but he didn't think anyone from the commissioner's office bothered to verify it. "I could have lied," Smith said. "I could have said I put in 120 hours or 200 hours. They would have believed me."



Lawrence Taylor's new book sacks the NFL's drug policy.

Smith and Taylor's remarks underline a sad fact. Many businesses use pro sports as a role model for running a company and have instituted mandatory drug testing because of the "drug problem" that is supposedly ravaging society. These business typhoons know there's a drug problem, because they read the sports pages. But the continued failure of pro sports to institute a drug policy that works should have sent the message that mandatory drug testing is not the solution to the "drug problem." As long as warnings from the Lawrence Taylors and Lonnie Smiths go unheeded, the rest of us poor bums are gonna suffer. ●

ROOT OF A POT BUST

A Redmond, Washington postal carrier smelled what he thought was pot in a package he was carrying. He showed it to two other employees and his supervisor. They all agreed that the package smelled like pot, so they brought in the police dog, Sammy, who has

extensive training in the pot-sniffing field. Sammy gave a positive response for marijuana. Postal inspectors got a search warrant from a federal magistrate.

Once the package was opened, they found it contained a child's t-shirt and a plastic bag containing several pieces of ginger root. ●

GENERAL



MAYHEM

Those Fascist Communist Creeps are at it again. In August, New York was the scene of Radio New York International, a pirate radio station that broadcasted cool music. Nothing but. No mindless disco-rot allowed. Radio New York provided alternative freeform rock'n'roll in response to the boring rock stations already in existence.

So the lamebrains in this great government of ours decides, "Oh no. This is decadent. There's no boring music or boring commercials being broadcast. We must put an end to this evil."

But they couldn't do a thing. The ship, The Sarah, was broadcasting in international waters under a Honduran flag.

Unfortunately for Randi Steele, operations manager for the station, he underestimated the stupidity and lowness of the Federal Communications Commission (FCC). At 5:30 in the morning, armed Coast Guard officials boarded the ship equipped with orders to halt the wicked sinfulness of Radio New York. The crew of The Sarah was arrested, and all of the radio equipment on board was destroyed.

Great. It's really good to know that the government is hard at work preventing someone from playing The Ramones and Country Joe and the Fish.

Who knows what the fuck these right-wing banana brains think? I mean, aren't these the same people who think that Ozzy Osbourne records are leading teenagers to suicide?

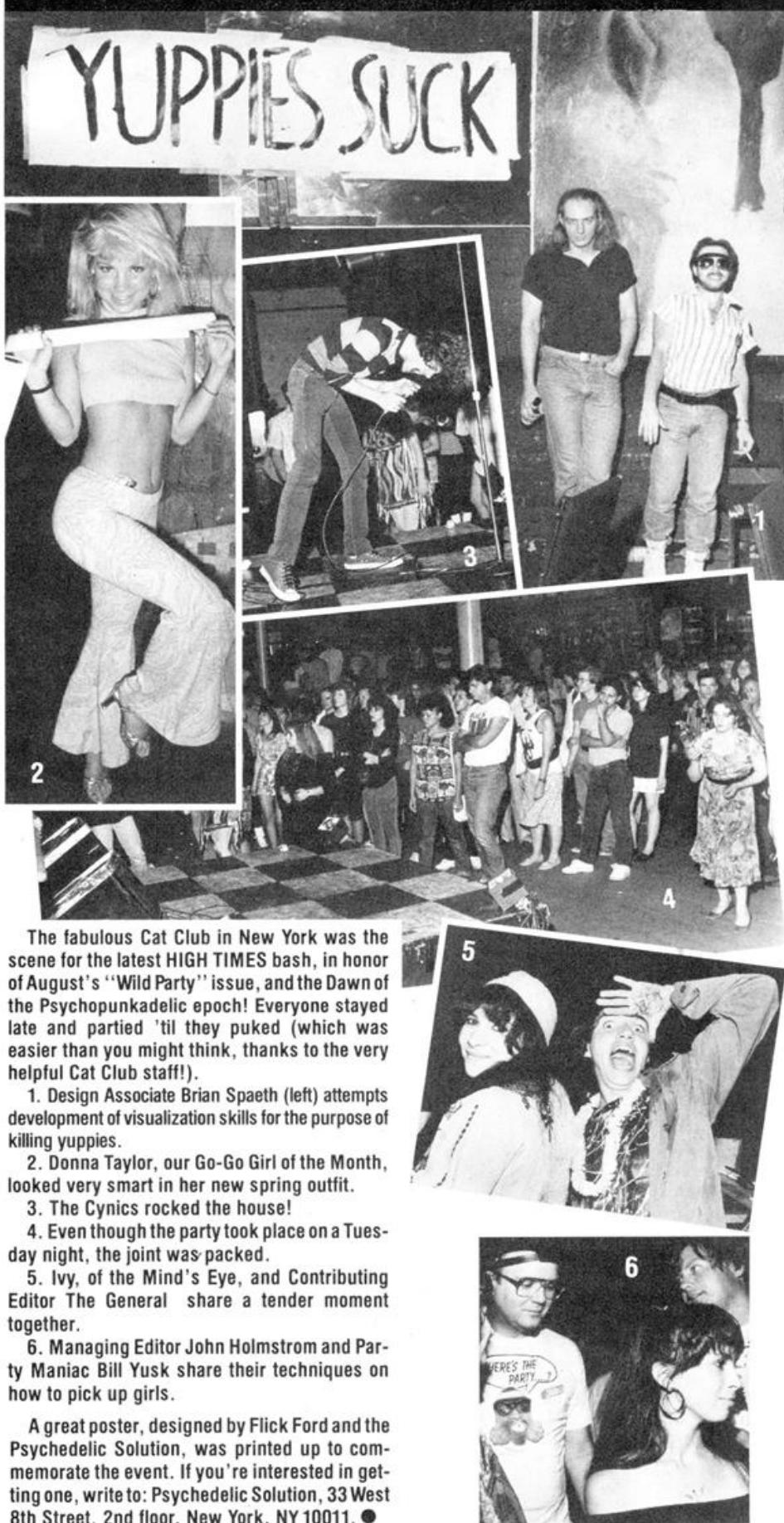
Let me tell you, if there is something that should be plundered off of the airwaves, it would have to be the David Toma show. The man blinks, and he blinks, and he blinks, and he squints, and by the end of the program, all the kids in the audience are blinking and squinting.

What the hell is that?

Radio New York International, who used no profanity, is out the window, but if one good thing is to come out of it, it's that this may set a precedent for other pirate radio stations. Twenty-four hours a day we'd be able to listen to the high-quality rock'n'roll without commercial interruption. After that, who knows? We could have pirate television stations. One station could show Bullwinkle the Moose all day long!

Today, pirate radio; tomorrow, Peabody and Sherman. ●

HIGH TIMES THROWS A PARTY!!!



The fabulous Cat Club in New York was the scene for the latest HIGH TIMES bash, in honor of August's "Wild Party" issue, and the Dawn of the Psychopunkadelic epoch! Everyone stayed late and partied 'til they puked (which was easier than you might think, thanks to the very helpful Cat Club staff!).

1. Design Associate Brian Spaeth (left) attempts development of visualization skills for the purpose of killing yuppies.

2. Donna Taylor, our Go-Go Girl of the Month, looked very smart in her new spring outfit.

3. The Cynics rocked the house!

4. Even though the party took place on a Tuesday night, the joint was packed.

5. Ivy, of the Mind's Eye, and Contributing Editor The General share a tender moment together.

6. Managing Editor John Holmstrom and Party Maniac Bill Yusk share their techniques on how to pick up girls.

A great poster, designed by Flick Ford and the Psychedelic Solution, was printed up to commemorate the event. If you're interested in getting one, write to: Psychedelic Solution, 33 West 8th Street, 2nd floor, New York, NY 10011. ●

QUICK FLASHES

McROBOCOP—University of Wisconsin researchers developed a \$20,000 prototype robot that would replace teenage labor at fast food restaurants. "These types of mechanized systems are going to be more popular in the fast food industry as the minimum wage goes up and the population that has traditionally worked these jobs—16 to 18 year olds declines," the head of the research team claimed. Robots could start work as soon as 1990, when the fast food industry projects they'll need 30 percent more workers.

ICE CREAM, YOU SCREAM—Jerry Garcia signed a deal with Ben & Jerry's, a Vermont ice cream company, to license "Cherry Garcia," a new flavor of ice cream. Part of the royalties will be paid to the Rex Foundation, a nonprofit organization supported by the Dead.

DIRTY ART—Orlando police were about to burn a "horrible" picture of a naked woman with a bearded man along with a collection of porno, when property manager Phil Edwards examined the signature on the pic. It turned out the offending image was an original 1966 etching by Pablo Picasso, worth between \$2,000 to \$9,500.

RADON DETECTOR—Radon, a naturally occurring gas, can't be detected by humans and is quite capable of killing you. More than one house in five surveyed for the Environmental Protection Agency (EPA) had too much radioactive radon in the air. For a simple, passive charcoal radon detector, send a \$12 check or money order to Radon Project, P.O. Box 90069, Pittsburgh, PA 15224. The federal EPA also publishes a list of state-by-state radon contacts.

FLOG DRUNKS!—That's exactly what Alfred O'Connor, 73, claimed would cure alcoholics. O'Connor, an alcohol counselor in Hastings, MN, would strip drunks naked and whip them. He pleaded guilty to fourth-degree criminal assault after one of the drunks told police about his treatment.

RELIGIOUS FANATIC?—Oliver North's church's members practice faith healings and speaking in tongues. The Reverend Brian Cox, North's pastor at the Church of the Apostles in Fairfax, Virginia, told the NEW YORK POST: "Yes, Ollie North is a congregation member.... The ministry of healing is actively practiced.... Yes, there is speaking in tongues in the congregation."

VERY LOUD ROCK'N'ROLL—Vittoria Hohman has filed a lawsuit against Motley Crue, claiming that a live concert by the band in 1985 left her with permanent ear damage. "I think a lot of people have had a problem like mine, but nobody speaks up," she said.



IN CASE YOU MISSED IT— PEANUTS' cartoonist Charles Schulz's mother-in-law was held up for four days in Mexico on suspicion of drug smuggling. She was released last May 27th. Puerto Vallarta officials had refused to let Pam Vanderlinden, 74, out of the airport because they claimed her single-engine plane was on a list of suspicious aircraft compiled by the DEA. "It is so ridiculous, they might as well accuse me of running a brothel," Vanderlinden said.

GIANT POT BUST—Police in South Carolina found a pot forest of 104,000 plants, some as tall as 15 feet, in northern Dorchester County. The huge crop covered four fields, complete with irrigation wells and sprinkler systems. State Law Enforcement Division (SLED) Capt. Steve Smith estimated the haul at \$20 million worth of street pot. It took authorities three days to chop down the plants, haul them away, weigh them and destroy them. The fields were discovered by a SLED pilot who was searching for three local residents who had been reported missing.

DRUNK CURE—Swiss drug-development company Hoffman-La Roche claims that they've discovered a drug that instantly sobers up drunks. Company officials said the last thing Hoffman-La Roche wants is to make it easier for people to drink heavily.

POLISH REDNECKS—The country of Poland has flipped out over American country and western music, despite Communist official objections. "Too many people are convinced that this is Ronald Reagan music," said Polish C&W promoter Korneliusz Pacuda. "We are trying to convince them otherwise. It is music for the people, for the worker, the miner, the farmer."

ROCK'N'ROLL ADDICTS—According to a Russian doctor, many rock music fans are addicted. "If you completely isolate them for a week from such music," Dr. G. A. Aminev of Bashkiria University said to the newspaper SOVETSKAYA ROSSIYA, "they feel worse, their irritability rises, their hands start to tremble and their pulse is unstable. Reproducing music of this nature has a very strong narcotic effect."





Donna Taylor is half a Tart. A Thompson Tart, that is. The Thompson Tarts, Donna and Leslie, are bringing back classic go-go dancing. "We're the 'do anything' dancers," Donna says, "between psychedelic and futuristic dancing, we've created our own style."

Go-go dancing is her life. "It's my enjoyment and fulfillment, as well as my employment," she says. And appearing in HIGH TIMES is the high point of her life. "It really means a lot to me to be Go-Go Girl of the Month." Donna began reading HIGH TIMES when she was just thirteen, "with all my hippie friends." She moved from Connecticut to New York City to make it big as a dancer, and attends a private, all-girl Catholic college—in her spare time—where she studies ballet and classical dancing. "It's great to be different from all those girls," Donna smirks. "They have no idea what I do. I can't wait till they see this."

The Tarts met each other a year ago at Chippendale's—where they were doing freestyle jazz dancing—and became friends, roommates and dance partners (look for Donna's partner, Leslie, in a future issue of HIGH TIMES.) They've already performed their go-go act at many New York clubs like The World, the Limelight, The Tunnel, 1018, the New Rage club, and they've even hit the New Jersey go-go circuit. One of their goals is to take their act as far as they can, around the country, without having to hire an agent. They're currently working on a demo tape called "Get Smart" (for their single which will be called "Get Smart, Call a Tart").

"I'm very proud, because go-go dancers are out of trend." Donna adds that there's a reason for that. "People get go-go dancing and topless dancing confused," she says. "I won't take off my clothes for anyone."

"Not even HIGH TIMES?" we asked.

"Nope!" •

GO GO GIRL OF THE MONTH

WHOLESALE LIGHT SUPPLIERS

509-456-8005

"Don't Pay Retail"

BASIC KITS (NO REFLECTOR OR ENCLOSURE)

1000 HALIDE (MS 1000)	\$150.00
400 HALIDE (MS 400)	\$105.00
1000 HIGH PRESSURE SODIUM (LU 1000)	\$195.00
400 HIGH PRESSURE SODIUM (LU 400)	\$165.00

EXPANDED KITS (48" REFLECTOR AND STEEL ENCLOSURE)

1000 HALIDE (MS 1000)	\$175.00
400 HALIDE (MS 400)	\$130.00
1000 HIGH PRESSURE SODIUM (LU 1000)	\$225.00
400 HIGH PRESSURE SODIUM (LU 400)	\$190.00

C.O.D.'s SHIPPED

VISA AND MASTER CHARGE

DEALER INQUIRIES WELCOME

CALL COLLECT FOR LIGHTS

CARBON DIOXIDE SYSTEMS COMPLETE	\$150.00
AIR PURIFIERS - ELIMINATES SKUNK ODOR (150 cfm)	\$109.00

BOX 3361, SPOKANE, WA 99220-3361

Free Catalogue

Attention Indoor Growers!

The Real Best Deal On Super Halide & Sodium Systems

- All systems are professionally wired with safety and hazard free use in mind.
- Lowest noise ballasts available anywhere.
- All systems include your choice of 48" metal reflector or 18" porcelain reflector.
- Two year guarantee on all ballasts.
- All bulbs guaranteed.
- All Halide 1000 Systems are MS 1000 Super Lamps. (125,000 LU)
- All systems come assembled with your choice of hoods.
- MS 1000 Watt Super Halide System \$185.00
- 1000 Watt High Pressure Sodium \$260.00
- 400 Watt Halide System \$140.00
- 400 Watt Sodium System \$180.00
- We carry a complete line of growing needs.

Visa & MC welcome

Please send for our price list and flyer on our MAXIMIZER CO₂ SYSTEM. Shipped C.O.D. To order send money order or certified check to: C.O.D.'s accepted with 20% deposit. Emerald City Halide North, 8016 15th Ave. NE, Seattle, WA 98115 206-527-1035

INCREASE YOUR HARVEST 4 TO 8 TIMES!

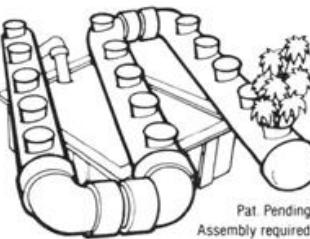
Break free from jerry-rigged containers that cram a few plants in a large area. With space efficient technology, the GOOD BUDDY MODULAR, at only 31x47x18 high, effortlessly grows between 15 to 25 adult plants! Guaranteed! A real sea of green.

All state of the art growing methods, including Perpetual Harvest, are compatible with the Buddy System. Basing plants in 10 oz. drinking cups allows: • Quick and easy transfer, re-arrange and harvest of *individual* plants, anytime - no connections • Freedom from changing bulky, pest harboring, grow media • Independence from special containers.

No more rootbound screens and tubes that clog and flood. Forget unstable pH, excessive humidity, and other problems from grow media, and open drip or flow schemes. End nightmares from internal sprays.

Just set your plants or seeds into your GOOD BUDDY MOD. Roots are directly fed and aerated for 10% quicker growth. The most advanced, maintenance free system is also the simplest! Call us for all your growing needs.

C.O.D./VISA/M.C.



Showroom: 14902 S. Figueroa, L.A., CA
Rosecrans exit, Harbor Fwy.
Higher Yield, 712 Wilshire Blvd., Suite 12
Santa Monica, CA 90401 (213) 394-6777

Request your free booklet, *Guide to Hydroponic Systems*.

SINSMILLA TIPS MAGAZINE

THE SOURCE FOR MARIJUANA INFORMATION

INDOOR & OUTDOOR CULTIVATION TECHNIQUES,
POLITICAL NEWS, COMMENTARY & SATIRE,
LIFESTYLE AND MUCH MORE SINCE 1980!

EACH QUARTERLY JOURNAL SENT IN SEALED BROWN
ENVELOPE. WE DO NOT SELL, RENT OR GIVE AWAY
OUR MAILING LISTS. WE'VE EARNED YOUR TRUST!

SEND \$6 FOR SAMPLE COPY OR \$20 FOR 1 YEAR SUBSCRIPTION

NEW MOON PUBLISHING, INC.

PO BOX 90, CORVALLIS, OREGON 97339

503-757-0027

OREGON POT VOTE

continued from page 20

However, Michael Spaan, the U.S. attorney for Alaska, where personal-use cultivation is permitted, came to Oregon and actively campaigned—including writing editorials in Oregon's leading newspapers—against the measure, saying that the Alaskan experiment was a failure. Alaskan state officials disagree, and say it has freed law-enforcement officers to concentrate on real criminals. But their federal attorney contradicted them in his campaign in the Oregon election.

Charles Turner, U.S. attorney for Oregon, led the campaign against the initiative on a state-wide level. He made television appearances and participated in numerous debates while campaigning against marijuana's decriminalization. Turner stated on video tape that U.S. Attorney General Edwin Meese had directed him and other regional Justice Department officers to seek the marijuana initiative's defeat.

In May of 1986, Turner used an official letter-head when writing to every law-enforcement agency in the state of Oregon, asking them to urge their employees to "actively oppose" the marijuana initiative. Several sheriffs carried through, and deputies distributed campaign materials opposing the issue while in uniform. The Portland Police, when arresting a supporter of the initiative with 13 plants, confiscated his marijuana initiative pamphlets, t-shirts and hats even before taking the plants. Then they took this political material and displayed it at a news conference before taking the grower to jail. This performance was the lead story on the local news and was brought up throughout the campaign by the issue's opposition. It is clear that Turner's directive was acted upon.

Assistant U.S. Secretary of Agriculture George Dunlop came from Washington, D.C., and publicly campaigned to defeat the Oregon Marijuana Initiative.

When OMI and NORML filed complaints last year, the Department of Justice in Washington, D.C. rejected their claims. John Russell, a spokesman for the department said: "Meese does not see it [Measure 5] as a political issue. He sees it as a law-enforcement issue."

Because of that attitude, the Justice Department has rejected the allegation of Hatch Act violations, Russell said. Meese has written Turner a "very glowing letter commending him for his efforts."

"This is not a state issue," Turner said. "This is an issue that has not only local, but national and international implications."

The 87,000 Oregonian voters who signed the petitions that placed the issue on the ballot might disagree with him. Since the state voters were addressing it, it is a state political issue.

NORML Director John Gettman said recently, "I feel like a chihuahua biting at the heels of this giant." He said that after deep consideration, he had decided that NORML should pursue this investigation. "I know there have been Hatch Act violations. I hope the federal judge initiates an investigation so we can get to the bottom of this." ●

TRANS-HIGH QUOTATIONS MARKET

MAJOR MARKETS

Alton, ME	<i>Indica-sativa</i> hybrids, "very selective connoisseur colas"	lb	1300-1500
	<i>Indica-sativa</i> hybrids, "primo loose interior bud"	lb	1000-1200
	Hybrid clones C#40, "Hardly Legal's best stock"	lb	1500-1700
	Pure <i>indica</i> strains, "commercial colas"	lb	100-1200
	Pure <i>indica</i> strains, "loose interior bud"	lb	850-1000
	Pure <i>indica</i> clones C#40, "good high"	lb	1100-1300
	Pure <i>sativa</i> strains, "commercial colas"	lb	1000-1200
	Pure <i>sativa</i> strains, "loose interior bud"	lb	850-1000
	Pure <i>sativa</i> clones C#40, "good high"	lb	1100-1300
	Pure strain seed stock, "30 seeds to each pound"	—	a gift
	Hawaiian <i>sativa</i> , "the pineapple connection"	lb	1500-1700
	NORML special bud, "funding the resistance and the national cause"	lb	donation
	Gold Thai sticks, "dreamland"	lb	1500 firm!
	Wild hemp, "grows anywhere"	lb	50
	Hand-rolled charas, "for a select few"	oz	250
	Khyber honey oil, "potent"	oz	200
	Burmese opium, "a gift from God"	oz	300
Austin, TX	Skunk	1/4-oz	35
	Killer compact green buds	1/4-oz	25-30
	Good, regular green and brown pot	1/4-oz	25
	Shrooms, "haven't seen much lately"	gm	5
	LSD: Kaleidoscope, one "10-12-hour trip, knock your dick in the dirt shit, wow"	one	5
	LSD: Checkerboard, Rainbow	one	5
	LSD: Yin-Yang, "too much strychnine, teeth-grinding shit"	one	5
	LSD: Black Cat, "sucks"	one	5
	Cocaine, "if you know the right people, quality can be as much as 75-85%"	gm	90-100
	HIGH TIMES, "reasonable"	1-issue	3.95
	Skunk #1	lb	2800-3000
Humboldt Co., CA	Skunk-Afghan hybrid, "fucking incredible high, top quality"	lb	3000-4000
	XXX hybrid	lb	2600-3100
	William's Wonder, "William's Wonder"	lb	2800-3000

Send quotations to: THMQ, 211 E. 43rd St., New York, NY 10017. THMQ is intended solely for informational purposes. All entries should be typed or neatly written: If you are unable to compose a legible entry after testing your samples, please wait until you have control of your penmanship before sending us your information. Marijuana is listed by 1/4-ounce, ounce, and pound prices only. Don't bother sending prices for hard drugs. Prices in this issue are current as of August 15th, 1987.

Memphis, TN	R1-new hybrid, psychoactive, best I've seen in a long, long time, "very rare"	lb	4000-4500
	Thai, average high, 1/4-oz not too many seeds, "tons of it floating around"	oz	40-55
	Mexican, from L.A., "it's hard to give away, it's like smoking shitty dirt"	oz	80-90
	Shrooms, "depends on who you know"	gm	2-8
Pensacola, FL	Mexican sinse, "few seeds"	oz	100
	Colombian brown, "shitty"	oz	65-70
	Cocaine, "over-priced"	gm	280-300
	Green Mexican, "good high, nice bags of 8-gms"	1/4-lb	100-110
	Killer Mexican, "red-haired, smaller bags, but killer high, lasts"	1/4-lb	250-270
	Commercial brown, "medium high, tastes old"	1/4-lb	215-230
	Jamaican <i>indica/sativa</i> cross, "mind-boggling and ass-kicking"	1/4-oz	70
	Indoor Hawaiian <i>indica</i> bud, "pricey and scarce, but mind-smearing lobotomizer"	lb	2200
	Hydroponic Skunk #1, "unbelievable, nothing better"	lb	250
	Hash, Red Leb, "good, but scarce"	gm	260
	Mushrooms, "hard to find, but good"	gm	2200+
	LSD: Grateful Dead, "8 hours of good fun"	1/4-oz	5
	LSD: Mickey Mouse, 4-way, "12 hours of better fun, walls move, floors melt"	hit	30
	LSD: Zeppelin blotter, "clean and psychedelic"	hit	250
	LSD: liquid drops of Grateful Dead, "unbelievable"	drop	6
Phoenix, AZ	Cocaine, "good quality buzz"	gm	4-5
	Green bud, "good quality buzz"	1/4-oz	235+
	LSD: Checkerboard, "good blotter"	hit	30
		100	5

LSD: Clownface blotter, "good sheet price, but too much strychnine"	hit	5	160
LSD: Global, "same ol' killer global, clean and intense trips"	hit	5	160
Cocaine, "some of Arizona's best, almost So. Cal.-style rocks, no lie"	1/4-gm	25	
Crystal meth, "high quality rocks, likes slivers of glass"	1/4-gm	30	
	3 1/2-gms	275	

AROUND THE U.S.

Albuquerque, NM	African- <i>indica</i> , "The Rad, The Mean Green, one-hit shit"	oz	200
	Mountain Skunk, "nice buzz"	oz	180-200
	Brown Mexican, "nice buds"	oz	60-100
	Green Mexican, "seeds"	oz	60-100
	Lime-green sinse, "alright on the head"	oz	100-150
	Mushrooms, freeze-dried, "killer, moving walls"	gm	6-10
	Cocaine, "world's finest rocks, direct from I-40"	gm	100-120
Chesnut Ridge, PA	Mexican sinse, "free, pleasant buzz"	1/4-lb	450
	Mushrooms, "lots"	gm	6
Cleveland, OH	Jamaican compressed, "green and wet"	1/4-oz	2-5
	Jamaican sinse, "green and sticky, one-hit"	oz	45
	California/Baja weed, "above average and green, great value"	1/2-lb	160
	Hash, good, real rare, "wish more was around"	gm	30
	LSD: Globes, "real clean"	hit	45
	LSD: Grateful Dead, Clouds "pretty speedy though"	sheet	2-5
Danville, CA	Coke, "real average"	gm	10
	Indica Big Bud, "definitely the real God"	oz	3.50
	Chocolate Thai Buds, "the Deep Buds"	1/4-oz	55
	Mexican <i>sativa</i> , "mostly male, overpriced"	1/4-oz	50
	Hash, direct from Afghanistan, "the Desert Buds"	gm	10
	Shrooms, Liberty Top from Washington	oz	60
	LSD: all types; Clowns, Flying Eyeball	one	40-80
	LSD: Good Gel, Black Pyramid	100	3-5
	Coke, "usually pretty clean"	1/16-oz	80
		oz	1000

Fresno, CA	Thai, real stuff, brown and green, "devastating buzz"	1/4-oz 1/4-lb	50-70 600		Mushrooms, "as many as you can pick, everywhere"	—	FREE	Humboldt Co. <i>indica</i> , available by special order, "best in the West"	oz lb	300-325 4000	
	Mexican dirtweed, "who wants it"	1/4-oz 1/4-lb	15-25 200		LSD: White Blotter, "damn good"	one	5	Hawaiian sinse sticks, authentic Maui, wrapped around stick with red thread, "excellent, of connoisseur quality"	3-4-gm stick	35	
	Sinse buds, "San Joaquin Green—good, fresh buds, stoney for the price"	1/4-oz 1/4-lb	30 200-250		LSD: Musical Note, "very trippy"	one	5-7	N.J. Skunk #1, Durban/Chitral, William's Wonder, other S.S.C. stock, "indoor best in the East"	oz	200-250	
	Cocaine, "fucking blizzard around here, a lot of recon, but not all; prices getting outrageous"	oz	850-1200		California Orange, "grown hydroponically in FL, killer"	oz	150	Mushrooms, hydroponically grown beauties, "good tripping"	1/4-oz oz	50 100	
	Rock (crack), "same old shit, but what is it"	one	10		Afghani hash weed, "won't smoke in paper"	oz	150	Cocaine, all-rock	gm oz	80 1000	
Grand Junction, CO	Herb, brown, good, "goofy high"	1/2-oz	60		Hash, blonde Acid, blotter	gm one sheet	8 4 250	Pontchartrain, France	African grass, "good, maybe from Nigeria"	1/4-oz	30
	Acid: Global, "very clean"	hit	9		Cocaine, "burned out"	gm oz	90 1100	Black Afghani hash, "very good, a real bomb"	2-gms	15	
	Coke, "Aspen's Reject"	gm	170		Green sinse, "looks and smells like Nebraskan moderate buzz"	1/4-oz	35	Brown hash, "from Morocco, good, but makes you drowsy"	2-gms	15	
Indianapolis, IN	Red Hair sinse, "buddy, good"	1/4-oz	35		One-year-old brown ditchweed, "headache and sore-throat buzz"	oz	5	Red Lebanese hash, "ok, good magical dirt"	2-gms	15	
	Black Hair Buddha "excellent"	1/4-oz	40		Thai strain, "real good"	1/4-oz 1/2-oz oz	40 75 135				
Kansas City, MO	Green with red hairs, more red than green, "seedy but potent, direct from Texas"	1/4-oz oz lb	25-30 100-120 1000		Dark green sinse, "dynamite, real spicy"	1/4-oz	50				
	Red-haired sinse, "very good, few seeds"	1/4-oz lb	25-35 100-125		All-red sinse buds, "real good"	1/4-oz	40				
	Brown, "fair to okay"	oz lb	50-120 500-900		Reddish sinse, "average commercial"	1/4-oz	30				
	Colombian, "good, comes and goes"	oz lb	100-120 900-1200		On The Road, MI	<i>Indica</i> bud, "better bring some of your own"	—	—			
	Good skunk, "hardly ever much around"	1/4-oz oz	30-40 120-150		Joints, "few and far between, shakey"	one	1				
	Farm weed, from KS, losing potency, "these people need to get a new strain or go out of business, over-priced"	1/4-oz	32.50-35		LSD, blotter: Globes, Clowns, Gels, Stripes, Album Covers, Escher, White, Cats Under Stars, SK Jelly-fetti, "long strange trips"	ea 100	2-3 60				
	<i>Indica</i> , "good but rare"	1/4-oz	40		Shrooms	gm 1/4-oz gm	5 25 5				
	Homegrown red-haired sinse with seeds, "very potent"	1/4-oz	45-50		Opium, crystal, "great"	1/4-oz	25				
	Black hash, "very rare"	1/4-oz	50		Colombian 'mersh, "stoney as hell, but barely green"	1/4-oz 1/2-lb	30 630				
	Shrooms	oz	100-120		Lime-green, home-grown, "closest to sinse all summer"	34-gms	125				
Mansfield, OH	Jamaican <i>sativa</i> , "buzzy"	oz	100		Green Colombo brick pot, "red-haired, smells of ammonia, bad ass"	1/4-oz oz	30 110				
	Dirtweed brown, "seedy"	oz	80		Guero Gold, "excellent and stoney"	8-gms oz lb	30 100 1000				
	Ditchweed Green, "Indiana junk"	oz	50		Mushrooms, "as much as you can pick"	—	FREE				
	Indoor Green, "stoney big buds, best buy"	oz	160		LSD: Musical Note blotter, "good when fresh, but getting old"	hit 100	6				
Maple Ridge, British Columbia, Canada	Redhair, <i>sativa</i> , "mild buzz"	1/4-oz oz	40-50 140-160		LSD: Blue Globes, "back to the '60s"	hit	5				
	Cambodian, "gold and tasty"	1/4-oz oz	60-65 200-225		LSD: Miss Piggy blotter, "ditto"	hit	4				
	Skunkweed, hydro, "sticky and deadly"	1/4-oz oz	70-80 200-250		Cocaine, "ether base, 2- and 3-gm rocks"	gm 1/8-oz	75 175				
	Hindu Kush, <i>indica</i> , "loads of resin"	1/4-oz oz	70-80 200-250		Piscataway, NJ	Mexican sinse, green-brown, small <i>sativa</i> buds, "average high"	1/4-oz oz 1/4-lb	55 160 525			
	Homegrown shake, "good for oil"	oz	20-40		Jamaican commercial: long, thin seeded, brown buds; "harsh but stoney"	1/4-lb lb	325 1050				
	Black hash, "moist, very good"	gm 1/4-oz oz	10-15 50-70 160-225		Top-grade Jamaican <i>sativa</i> semilla, brick, dark brown, "Thai-like intensity, very few seeds"	oz 1/4-lb lb	170 500 1800				
	Grass Oil, Iso, "good buzz for the money"	gm	15-25		Vermont <i>sativa</i> , last year's harvest, it's old but still potent, "upbeat high"	oz 1/4-lb lb	160 575 220				
	Mushrooms, psilocybe, "pick your own, they grow wild here"	—	FREE		Arkansas sinse, grown from Brazilian seeds, gold color, great taste, "2 hits and you're good"	oz	200				
	Acid, blotter, "nice trip"	hit	5								
	Cocaine, "everywhere"	gm	140-200								
Monroe County, NY	Homegrown sinse	1/4-oz	60								
	Mexican commersh, "ugh"	1/4-oz	20								
	Mexican red sinse, "mmmm, good"	1/4-oz	75								
	Mushrooms, "some good, like always, you must know your supplier"	oz	120								
	Coke, pink shale	gm 8-ball oz	100 250 2500								
Montgomery, AL	Colombian sinse, "the valley weed"	1/4-oz oz	35 120								
	Commercial sinse	1/4-oz lb	30 1250								

IN THE BOONDOCKS

Chambersburg, PA	<i>Indica</i> , via postal from Boston, "intense crystallization, fine"	1/4-oz	55
	Pine Mountain Bud, "smells like a forest, very nice, all full buds"	1/4-oz	40
	Sinse, loose buds, "OK smoke"	1/4-oz	110
	Local brown choke, "not worth the effort"	1/4-oz	30
	Hash, black and potent, "hard to cut, hard to find"	1/4-oz	100
	LSD: globes, "13 hours, wow, clear and clean"	hit	40
	LSD: blotter, "must be stale, avoid"	hit	110
	Coke, "a white Xmas, mostly rocks, very clean"	gm 1/8-oz	225
East Troy, WI	<i>Indica</i> , 1-hit, rare"	1/4-oz	60
	Thai: hard to find, but great prices; "off the stick"	1/2-oz	75
	Hash, Black Afghani, "primo"	gm	9
	Hash, Blond Lebanese, "fresh and just as good as the black"	1/2-oz	110
	Hash brownies, "hold on"	one	10
	Shrooms, "real blue and tasty"	lb	1000
	Acid, Album Covers, "Led Zep, yummy"	hit	50-60
	Acid, Whirls, "Berkeley quality"	sheet	65-75
	Acid, liquid, "so-so"	1-drop	1-2
	Cocaine, "recompressed, it sucks"	1/4-gm	25
	Crystal meth, "good"	1/4-gm	25
Hagerstown, MD	Good sinse with red hairs all over the buds, "great deal"	1/2-oz	40
	Dirty brown pot, "Colombo"	1/2-oz	80
	Black hash	oz	150
	LSD: Globe, Clown, Checkerboard, White Blotter, "a lot more since the Dead concert"	1/4-oz	40
	Coke, "great, speedy buzz, big rocks"	gm	100

LETTERS



CALIFORNIA

There are plenty of high times here in Fresno, California, even though CAMP is cracking down hard (assholes!). No drought right now, and harvest is soon to be. Problem 'round here is we're knee deep in cocaine with only one straw. Soon, with prices so low, the country will be full of coke fiends, not potheads. More for the rest of us! Trying to shovel out.

B.O.O.

Fresno, California

MISSOURI

As you can see (THMA, August '87), we here in K.C. are doing A-OK. Good pot has been plentiful all this year. No dry spells whatsoever. In fact, this year has been better than the last two or three years. Please print this and, hopefully, HIGH TIMES will get some more media attention (again) in this area. Legalize marijuana. The sooner the better so the world as a whole can take care of more important problems. We, the potsmokers of America, are tired of this prohibition. History repeats itself. Prohibition does not work. You'd think those idiots in office would know a lot of history. Free the weed and free the world. Peace and love forever.

K.C. (no Jones in here)
Kansas City, Missouri

OHIO

I thought I would send you a rundown of the scene at Kent State University. There is still a very liberal, almost anarchistic, movement alive here, and psychedelic use is common among many students. Good, clean LSD and cubensis mushrooms grown in Ohio are pretty much the favorites. There have been several "acid tests" based on the "tests" in San Francisco in the mid and late '60s, and these parties were great experiences with Dead-style music mixed with reggae and blues. (The cops came to one of the tests, but only because of illegal parking.)

The pot situation has changed over the last few years though. Quality is getting constantly better and quantities have picked up. **Indica** and some hybrids have been turning up quite often. There is really a revolution going on in indoor cultivation. People can now see that it shouldn't be a crime to grow some plants for personal use, and they are

starting to pick up cultivation. Even clones are surfacing for those who desire them. There is still, always, the brown weeds and lightly seeded, green, commercial **sativas**, but people really prefer **Indica** or its hybrids; especially the really sweet **Indica/Sativa** hybrids.

I hate to mention it, but coke is here. Most don't use it, and I think local use may be declining. I hope so, because I feel bad for my addict friends and wish they would quit.

I wish HIGH TIMES good luck in the war against press restrictions and other types of government repression. We are free, responsible people who should be able to say "No" to Nancy and Ronbo!
Indica
Kent, Ohio

PENNSYLVANIA

I started my plants indoors in April, put them out in May. On June 5th, seven plants were over eight feet tall. A bad storm happened about the second week in July, and I lost a lot of big, beautiful plants. It is now August 5th. I have 5 plants growing over 12 feet, 4 plants over 6 feet, and 15-20 plants under 4 feet. Yeah. It should be an alright year.

RAV
Chesnut Ridge, Pennsylvania

Well, summer is here, and the beginnings of a summer pot drought are cropping up. Pot prices are easing up the ladder again. It's summer! I don't believe it will be as bad as the summer of '86, because we were in a full-tilt drought already at this time last year!

Beaver County, Pennsylvania

FRANCE

Prices in Pontchartrain, France, are the same as everywhere else in France, 100 francs—but quantity is not the same (depends on quality). French people love your magazine!

Marc
Pontchartrain, France

SWITZERLAND

Hi there. July is just about over, and this means that most of the Swiss festivals are over: Leysin Rock (in the Alps!!), Montreux Jazz, Nyon Folk. This is a good time of year for finding good deals. You could find Moroccan hash for \$5 a gram in Nyon. Or 3.5-3.8 grams of excellent Black Afghani for \$25.00. "Nice" little tripa came to \$10.00 (usually from Amsterdam), and Ecstasy is very popular this year in Nyon—one gram for \$50.00!! (Not for me!) By the way, Nyon is a four day concert festival (from reggae to rock) outdoors. Montreux is two and a half weeks in a casino, and Leysin is outdoors for three days in the Alps. For pot, we'll talk about it in ten years. Thanks to your article, I also discovered Negril and Jamaica.

The Little Globe Taster
Switzerland

Wild Hemp Map Seized by Police!

Dig, if you will, this story I clipped out of my local newspaper. Do you (or anyone else for that matter) know where I could obtain one of these maps? Also, could you publish this clipping so a lot of fellow readers could have a laugh like I did when I read the sheriff's name? I mean, just how much more cop can he get?

You know I have this great idea for your harvest issue (or a future issue). Instead of having the usual monthly centerfold of pot, how about having a harvest map (I'm sure you guys could obtain one)? It would be a different, interesting, highly welcomed centerfold!! Then everyone would have their own map, a collector's item; something to hold on to and pass down from generation to generation. How about it guys?

Tokin' Jake
New Bedford, Massachusetts

PRINCETON, Ill.—A decade-old map which sells for \$150 to \$200 and shows where wild marijuana grows has been as difficult to eradicate as the illegal weed it pinpoints.

A dozen people from Michigan have been arrested since midsummer for harvesting the local crop, and many had copies of the map, said Bureau County Sheriff Jack Narczewski.

The maps first surfaced in the mid-1970s among people picking wild marijuana, which grows plentifully throughout Bureau County, the sheriff said. The maps are shaded in light green to indicate small marijuana fields, and dark green to show concentrations of the illegal hemp plant.

Okay readers, audience participation time again. We'd love to print a map that shows the locations of wild hemp fields all across the United States, but we need your help. So gather your compasses, sketchbooks and hiking boots, and explore your local topography. Maps should be at least 8 1/2" x 11" with towns/counties, states and landmarks clearly indicated. We will reward the most extensive and accurate mapmaker with a free subscription to HIGH TIMES for one year. Remember: 1) Neatness counts, and 2) we're looking for wild hemp fields only (God is one grower the Feds can't bust!). Send your entries to HIGH TIMES Maps, 211 E. 43rd St., Room 2001, New York, NY 10017.

IS NFT FOR YOU?

DOES YOUR HYDRO SYSTEM USE A BULKY MEDIUM AND AWKWARD PLASTIC BUCKETS?

IF SO, IT'S TIME FOR YOU TO MAKE A CHANGE TO THE MOST ADVANCED GROWING SYSTEM AVAILABLE TO THE HOME GARDENER.

IMAGINE 11 PLANTS GROWING IN A SINGLE TRAY SIX FEET LONG, SIX INCHES WIDE, AND ONLY TWO INCHES THICK.

CIRCULAR WATER WORKS



The CIRCULAR WATER WORKS CO. has designed an NFT (Nutrient Flow Technique) system for home growing. This system is the result of testing with thousands of plants from several varieties. A few of NFT's advantages are

- *continuous circulation
- *no plant water stress
- *low set-up cost
- *ideal for sea of green
- *two sizes
- *easily expandable
- *superior root aeration
- *unique rinse valve
- *no bulky mediums
- *quick, easy harvest
- *no system failures
- *up to 11 plants
- (pump and nutrient tank not included)

ORDER DIRECT FROM THE FACTORY AND SAVE!!

6 ft. unit (up to 11 plants).....\$47.00

3 ft. unit (up to 5 plants).....\$32.00

5 replacement mats.....\$ 8.50

*****POSTAGE PAID*****

For fastest service send money order to

CIRCULAR WATER WORKS

7320 S.W. Beau. Hills. Hwy. #208
Portland, OR 97225 ph (503)244-3815

30 day money back guarantee—most orders shipped in 48 hours
C.O.D. welcome—Quantity discounts—personal checks held 20 days

URINALYSIS

BE 100% CLEAN!

USE AGAINST ALL TOXINS

SAFELY

if applied as directed

For information and instructions,
send \$10.95 check or money order

and stamped, self-addressed

envelope to:

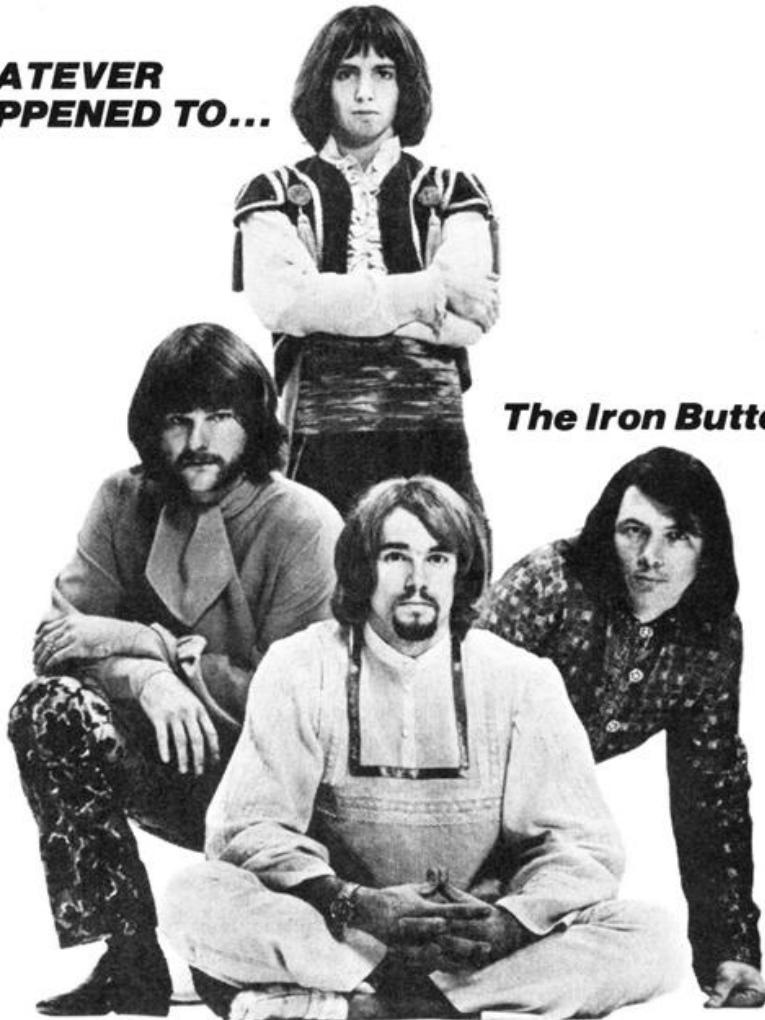
G C U Corporation

PO BOX L

Jefferson, OR 97352

30-day, money-back guarantee;
allow 4-6 weeks for delivery.

WHATEVER HAPPENED TO...



The Iron Butterfly?

PHOTOGRAPH COURTESY RICK GAGNON

The Iron Butterfly: (clockwise from top) Erik Keith Brann, Doug Ingle, Ron Bushy, Lee Dorman.

by Steve Bloom

Doug Ingle spent most of last year living with his parents in San Diego, California. That wouldn't be so strange if Ingle wasn't 42 years old and the author of the '60s psychedelic smash "In-A-Gadda-Da-Vida." He's been trying to get his music career back on track, playing solo acoustic guitar gigs at dives like Jim's Hickory Wood Bar-B-Q on El Cajon Boulevard. He says Iron Butterfly still owes Atlantic Records a record. Although he wasn't involved in it, the Butterfly's last album was released in 1975.

"Our music was supposed to be very druggie," says Ingle. "I thought it was a misrepresentation. That's why I wanted out." He insists that he smoked "surprisingly little marijuana and maybe did three-quarters of one tab of acid" while he was with the group. "I didn't like it," Ingle confides. "I'm hyper anyway." But while touring with the Jefferson Airplane in 1968, he did reach this conclusion: "If you're not going to take drugs, touring's a lot of work."

One day during the tour, Ingle got back to his hotel room and found cameras set up. He thought it was a press interview; rather, it was the FDA, trying to squeeze antidrug statements out of rock stars. "They wanted me to say marijuana was bad for the youth of America," he recalls. "I wouldn't say it's good or bad. That's not what they wanted. I don't know if that got me on a blacklist or what, but it wasn't long before things started to go haywire. I know it became

increasingly difficult to get airtime."

"In-A-Gadda-Da-Vida" got airplay in 1968, when it reached number 30 on the music charts. "They told us it would never get played on the radio," Ingle says. "Instead, it made us very rich." But it didn't take long for Ingle and the other band members to lose their footing financially. First came the failed real estate investments, then the audit. The IRS demanded \$280,000 from Ingle; he could offer only \$5,000. "I went from being a millionaire several times over to suddenly being confronted with the prospect of the welfare line."

Ingle worked in construction, gardened, and painted houses. He also collected BMI royalties. In 1983, he and two Butterfly alumni, Lee Dorman and Larry Reinhardt, went back out on tour. They lost \$8,000 and split up again in 1985. The last Ingle heard, Dorman was tending bar somewhere in Orange County, and Reinhardt was working in an L.A. studio. Original Butterfly bassist Jerry Penrod drives a San Diego city bus. Drummer Ron Bushy quit a job with AT&T to reform Iron Butterfly with ex-Blues Image ("Ride Captain Ride") guitarist Mike Pinera. They toured briefly, and now, original guitarist Eric Brown has plans to take his version of Iron Butterfly on the road.

Meanwhile, Ingle checked in to report that he'd won the open-mike contest at Jim's Bar-B-Q. "I'd have been happy to win a cup of coffee," he said, "but they gave me dinner." ●

It's Only Rock'n'Roll But You Like It

Sept. 1976 No. 13 RARE ISSUE

Bob Marley Interview, Peter Tosh on Holy Smokes, The HIGH TIMES Guide to Jamaica, How Kif is Cut, How to Buy a Judge, 8-page Zippy comic, Even Cowgirls Get the Blues (by Tom Robbins). \$25.00



June 1977 No. 22 LIMITED SUPPLY

Debbie Harry of Blondie (The Marilyn Monroe of Punk Rock), Confessions of a Hashish Eater (by Albert Goldman), Dope in the Cinema (by Joe Kane), The Fabulous Furry Freak Brothers (by Gilbert Shelton). \$15.00



HIGH TIMES is best known for its drug information, but our rock coverage has been pretty damn good. Check out some of these HIGH TIMES back issues. You'll see what we're talking about.

Jan. 1978 No. 29

Keith Richards Interview, Tina Turner, Lord Buckley, the Clown Prince of Jive (by Albert Goldman), Informer Chic, Lebanon: The Valley of Hashish, Robots You Can Buy, Harley Davidson, Zippy comic. \$25.00



Nov. 1978 No. 51

Women in Rock—Joan Jett, Debbie Harry, Nancy Wilson, Chaka Khan, Genya Raven; R.D. Laing Interview, Dope in the Comics Part 1, Patent Medicines, Massage, Garbology. \$5.00



Mar. 1980 No. 55

Frank Zappa Interview, Subliminal Advertising, The Secret Drug Life of Howard Hughes, The Great Smoke-Out, The Acapulco Golden Anthology of Stoned Verse, How to Roll a Marijuana Cigar. \$5.00



Nov. 1980 No. 63 SPECIAL MUSIC ISSUE! SHORT SUPPLY

John Lydon (nee Rotten) Interview, Elvis Presley's Dope Doctor, The Day They Buried Jimi Hendrix, New Wave Party, Notes To You (by Tuli Kupferberg), Music for the '80s, Wanted: The Real Urban Cowboy. \$25.00



June 1981 No. 70

Jim Morrison: A Personal Remembrance by Tom Baker, G. Gordon Liddy Interview, Cheech and Chong and Us, Bedtime for Gonzo: Down and Out at the Reagan Inauguration, Grass in the Joint. \$5.00



April 1984 No. 104

Rise and Fall of an American Guitar Hero—Michael Bloomfield, Bill Haley: The Daddy of Rock'n'Roll, James Lee and the Elixir of Life, The Paraquat Papers, Confessions of a Bruce Lee Fanatic. \$5.00



Feb. 1985 No. 114 COLLECTOR'S EDITION

Ridin' High With ZZ Top, Mutants From Outer Space, The Complete Cannabis Q & A (by Dean Latimer), Party Time in Brazil's Backwoods, The Hi-Q Test. \$10.00



Nov. 1986 No. 135 ORDER NOW! LIMITED SUPPLY

The Chocolate Watch Band, Smuggler's Journal, Ecstasy on Trial, 1986 Harvest Report, Baba Boom at the Mickey Mouse Cafe, "My Amerika" by Ed Hassle, Family Thai Sticks photo-funny. \$10.00



Feb. 1987 No. 138 SPECIAL ISSUE

Special Issue: Grateful Dead, High Times Guide to Cartoons, Grave-Digging With Tim Warren, The Amazon: An Endangered Rain Forest, Connoisseur Hash Making, Superior Indoor Growing. \$10.00



May 1987 No. 141

Psychedelic Mecca: L.A. in the '80s, Louisiana 'Shrooms, Smuggler's Journal, How to Beat Drug Tests, Camp Out, The Buddy System, Sex and Drugs and Homicide (by Dean Latimer). \$5.00



DO NOT SEND CASH! Send check, or money order payable to:

HIGH TIMES BACK ISSUES

211 East 43rd Street, New York, NY 10017

CHECK BOX:

<input type="checkbox"/> ISSUE #13	PRICE \$25.00	<input type="checkbox"/> ISSUE #70	PRICE \$ 5.00
<input type="checkbox"/> ISSUE #22	PRICE \$15.00	<input type="checkbox"/> ISSUE #104	PRICE \$ 5.00
<input type="checkbox"/> ISSUE #29	PRICE \$25.00	<input type="checkbox"/> ISSUE #114	PRICE \$10.00
<input type="checkbox"/> ISSUE #51	PRICE \$ 5.00	<input type="checkbox"/> ISSUE #135	PRICE \$10.00
<input type="checkbox"/> ISSUE #55	PRICE \$ 5.00	<input type="checkbox"/> ISSUE #138	PRICE \$10.00
<input type="checkbox"/> ISSUE #63	PRICE \$25.00	<input type="checkbox"/> ISSUE #141	PRICE \$ 5.00

CHECK BOX:

<input type="checkbox"/> ISSUE #13	PRICE \$25.00	<input type="checkbox"/> ISSUE #70	PRICE \$ 5.00
<input type="checkbox"/> ISSUE #22	PRICE \$15.00	<input type="checkbox"/> ISSUE #104	PRICE \$ 5.00
<input type="checkbox"/> ISSUE #29	PRICE \$25.00	<input type="checkbox"/> ISSUE #114	PRICE \$10.00
<input type="checkbox"/> ISSUE #51	PRICE \$ 5.00	<input type="checkbox"/> ISSUE #135	PRICE \$10.00
<input type="checkbox"/> ISSUE #55	PRICE \$ 5.00	<input type="checkbox"/> ISSUE #138	PRICE \$10.00
<input type="checkbox"/> ISSUE #63	PRICE \$25.00	<input type="checkbox"/> ISSUE #141	PRICE \$ 5.00

NAME

ADDRESS

CITY

STATE

ZIP

TOTAL _____

Send coupon or a facsimile. Please allow 6-8 weeks for processing and delivery.

AS SEEN ON LATE-NIGHT TELEVISION!



ANDRE GROSSMANN

CODE	Product	Quantity	Price	Cost
------	---------	----------	-------	------

LT	High Times Lighter	_____	x \$3.95 = \$_____	
BD	High Times Binder	_____	x \$9.95 = \$_____	
BC	High Times Hat	_____	x \$4.95 = \$_____	
HTFF	High Times Flippy Flyer	_____	x \$3.95 = \$_____	
TB	High Times Tote Bag	_____	x \$7.95 = \$_____	
WT	High Times Wallet	_____	x \$4.95 = \$_____	

Subtotal \$_____

Postage & Handling \$ 1.95

N.Y. Residents Add Sales Tax \$_____

Total \$_____

Make check or money order payable to **HIGH TIMES**. Mail to:
HIGH TIMES Products, PO Box 1645, Grand Central Sta., New York, NY 10017. Please allow six to eight weeks for processing and delivery.

Name _____

Address _____

City _____ State _____ Zip _____

MY SOUL'S BEEN
PSYCHEDELICIZED!

PHOTOGRAPH BY ELIZABETSKY



Psychedelicize your
soul! Subscribe to
HIGH TIMES!

UNITED STATES

1 YEAR \$29.95

2 YEARS \$54.95

CANADA & FOREIGN

1 YEAR \$37.45

2 YEARS \$68.95

**ENCLOSE
PAYMENT
(CHECK OR
MONEY ORDER)**

NAME _____

ADDRESS _____

CITY _____

STATE _____

ZIP _____

Save 42% off newsstand price (2 year subscription rate). Enclose payment (check or money order). **HIGH TIMES** Subscriptions, PO Box 410, Dept. OM, Mt. Morris, IL 61054.

MARIJUANA

AND

HEALTH



ILLUSTRATIONS
BY
AMILLIA NAIRE

AN UPDATE OF RESEARCH RESULTS BY PETER GORMAN

ALTHOUGH CANNABIS has been subjected to endless study and clinical analysis, very little can be stated categorically as to its effect on health. The scientific literature is confusing and contradictory, and the marijuana issue polarizes emotions, making moralists of scientists. Since every researcher is aware that his or her work is going to be used somehow by someone in the case for legalizing or not legalizing public consumption, personal and political bias seems to filter through the work.

ACCUMULATION



Of the 420 known components of Cannabis, the major, if not the only, active component is Tetrahydrocannabinol, commonly called THC. This is a group of cannabinoids, sixty-one of which have been identified, many of which

Marijuana and its compounds are not simple drugs. What shows up theoretically doesn't always appear in the lab; what appears in the lab doesn't always appear in clinical practice. Being a psychotropic, its effects can vary widely from user to user. Perhaps it confounds science because it is a psychotropic. Spiritual aids are rarely classifiable.

In a time when designer cocktails can blow you into deep space with a single dose, and crack makes instant

produce some biological activity. Delta 9 THC, the principal active component in natural cannabis, produces almost all of the characteristic effects of grass. It is by far the most often studied of the active isomers found in pot.

The natural cannabinoids are relatively insoluble in water but dissolve in fats and fat solvents and are called lipid-soluble. When smoked, the THC is rapidly absorbed by the blood in the lung; high concentrations of THC there begin to fall rapidly within 30 minutes of smoking. From that point on elimination slows considerably. Roughly 25 percent of the initial THC and its metabolites remain in the body after a week, and traces from a single dose can be found for up to thirty days. In the body, the THC binds to fatty acids where it remains, unchanged, until it passes back into the blood stream for elimination.

Generally, lipid-soluble compounds are completely neutralized when

addicts of nearly everyone who smokes it, the issues of marijuana and its significance to health seem trivial. But here at HIGH TIMES, where pot is still king, we thought you should be apprised of developments in the field.

First things first: Nobody's found web-footed babies, tiny testes, atrophied brains, shrunken limbs or 44Ds in the average pot-smoking male's contribution to conception.

But that doesn't mean perpetual intoxication has the green light. So sit down, read this, and get some of the facts.*

bound to fatty acids, but some controversy exists over whether this rule holds true for the psychoactive ingredients of marijuana. There is no medical question about its distribution area—the fat cells of the entire body from the toes to the brain—or that it remains unchanged while bound there. The questions are what effect the THC has on the user while it waits for elimination, and whether the repeated administration of even small doses may lead to an accumulation of drug which is potentially higher than levels reached at any time after a single dose.

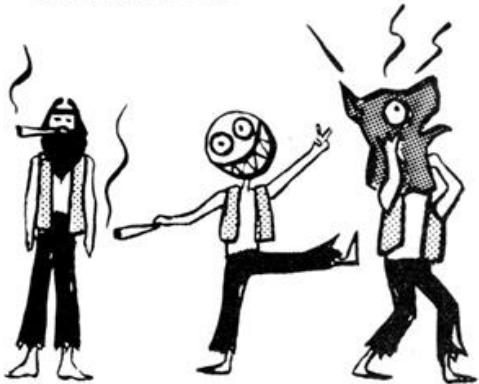
On one side of the argument, many researchers feel that general toxicity studies have shown marijuana to be one of the safest drugs ever studied for

*NOTE: Research studies involving humans referred to in this report—with the exception of a section on pregnancy and birth—deal with adults. As with all drugs, and specifically intoxicants, researchers across the board recommend against the use of pot by pre-pubescent and pubescent children.

cumulative effects. Another group feels that since so much is not understood about how the THC acts on the brain, it is possible that minute doses of active THC released back into the system may have a continued toxic effect. Reese T. Jones of the University of California at San Francisco said in recent correspondence that "When you say active, right now, that's an unanswerable question... it's in the brain, there's no question of that, but the activity issue, that depends on whom you talk to."

The problem encountered with the issue of accumulation is typical of issues involving marijuana. There is continued debate over long-term effects to both the chronic and casual user. Obviously, in areas of concern, researchers find the chronic user at more risk. Few studies have shown serious concern regarding long-term effects for the light smokers, even among antagonists to the drug.

ACUTE EFFECTS OF CANNABIS



Little controversy exists in discussion of the short-term or acute effects of smoking marijuana or hashish. These occur while high levels of THC are still in the metabolism. These short-term effects can include an increased pulse rate, giddiness, euphoria, hallucinations, reddening of the eyes, dryness of the mouth, sudden hunger, heightened sensory perception, sedation and conceptual changes. A number of these—in combination—are what is called "getting high."

Along with these generally pleasant changes, the user may also experience nausea, anxiety, paranoia, changes in blood pressure and body temperature, disorientation, confused states, short-term memory loss, temporary alteration of motor skills, changes in depth perception, poor attention span and depression. Some researchers have found that smoking grass inhibits

verbal and analytical skills in users while facilitating nonverbal tasks.

Additionally, marijuana, when coupled with other substances, can have an addictive effect. Alcohol and marijuana in combination can render the user dysfunctional; marijuana used in combination with barbituates can prolong the effect of the barbituate, and, in extreme cases (at least theoretically), cause nonlethal doses of barbituate to become lethal doses.

In general, researchers agree that these effects, both pleasant and unpleasant, are temporary. Even acute anxiety or paranoid reactions can be managed with verbal reassurance. A study of 700,000 hospital admissions in the United States in 1971 revealed that only ten of those were for acute cannabis reaction.

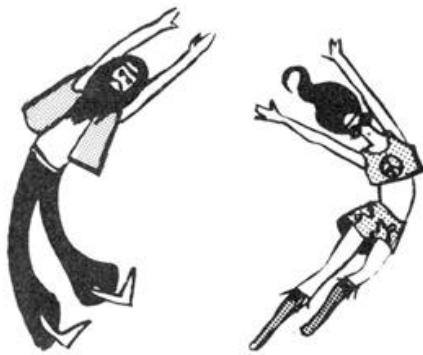


Certain tasks requiring fine motor skills—driving a vehicle or operating certain types of machinery and equipment—should not be undertaken while under the influence of marijuana. How long the driver will be impaired remains under debate, but even the most liberal thinkers acknowledge that driving should not be undertaken for three to four hours after smoking. The other end of the spectrum puts it at more like sixteen hours—depending on the individual, the quantity and quality of cannabis smoked and other factors.

In certain circumstances—people taking medication which cannabis might interfere with—individuals may have a short-term reaction deleterious to their health, and judgment should be exercised in the use of cannabis.

The effects mentioned above are considered to be of short duration and depend on the potency of the cannabis, the setting, and the user's orientation and state of mind at time of use. Generally, some of the negative—and, sorry to say, the positive as well—effects are expected to be more pronounced in the newer user rather than in the more experienced individual.

LONG-TERM EFFECTS OF CANNABIS USE



PULMONARY EFFECTS: The lungs are the natural target for the harmful effects of smoked material, and among chronic smokers, chronic bronchitis and mild airway constriction occur regularly. There are several known carcinogens in marijuana smoke and certainly more tar—though no nicotine—and incidental particulates than in tobacco smoke. But as yet there has not been a single instance of human lung cancer attributable solely to marijuana use.

The bronchial problems mentioned are somewhat more related to the act of smoking than they are to the active ingredients in grass, and the use of a water pipe can eliminate most of them.

Theoretical problems with fungi found in marijuana—Aspergillus, among others—are repeatedly mentioned in the literature. However, there has only been one official case of actual Aspergillus poisoning, and that was in a man whose immune function was depressed as a result of intensive chemotherapy treatments. Fungi can be killed by cooking the marijuana before use (100°C for 30 minutes), though in most healthy people this has not shown itself to be a problem. Marijuana smoke has been shown to inhibit pulmonary antibacterial defense systems, but the toxin involved is reportedly related to the smoke itself and not to any psychoactive component in the drug.

I recently spoke with Dr. Tashkin of UCLA, one of the leading pulmonary specialists in the country, and asked him what the real risks—long-term—to the smoker were. "We've found changes in the airways of marijuana smokers which are also found in the airways of cigarette smokers who go on to develop cancer... it doesn't mean they will develop cancer. That hasn't been shown to have happened yet, it's just a marker of increased

risk we've found in smokers using two or more joints a day for more than five years. The smoking of marijuana can lead to pulmonary complications, and that really is the bottom line. Of course, to find out the real risk we're going to have to rely on doctors asking their patients as to whether or not they smoke. We'll have to record that information, and that information will have to be made available to pathologists, and they will have to study the results."



HEART AND CARDIOVASCULAR EFFECTS: Smoking marijuana clearly changes heart function. The most common and important of which is through tachycardia—a speeding up of the heart rate that is sometimes accompanied by temporary changes in blood pressure—and, occasionally, by ventricular fibrillation—a condition where ventricle contractions become uncoordinated.

These effects have been shown to be temporary and reversible and not problematic in healthy individuals. In certain circumstances, however, they could lead to serious complications—specifically in people with heart problems or angina pectoris. Those taking medication for the heart are recommended to avoid smoking cannabis, since the THC may interfere with those medications.

The side effects of the speeding up of the heart rate (which also occur with tobacco smoking, though not to as great a degree) can include a temporary change in body temperature, dizziness on standing and a diminished capacity for exercise.

There is as yet no evidence of heart disease caused by marijuana or any evidence of permanent effects to the hearts of healthy individuals, though Reese T. Jones cautions that, "The lessons learned from chronic tobacco use are worth considering [since] THC seems to have a far more profound effect on the cardiovascular system than does nicotine."

HORMONAL EFFECTS: Effects from both acute and chronic exposure to cannabis have been shown in laboratory animals. In male animals, the primary effects have been a lower sperm production and changes in the serum testosterone levels in the blood. In female animals, changes include disrupted menstrual cycles and a decrease in the production of prolactin, a hormone which aids in the production of breast milk.

In humans, there appears to be a modest reversible suppressive effect on sperm production, which some studies debate, noting that tolerance quickly develops and sperm production rises again (even during smoking) with no evidence that this has a deleterious effect on male fertility. Female hormonal study, at best, indicates a slight disruption of menstrual cycles. Some researchers are quick to point out that this disruption would have an obvious effect on those trying to conceive on particular days, while others don't feel this is a particularly negative effect.

Some scientists feel that for men with marginal procreative or sexual functions, even a slight lowering of their testosterone levels might cause problems—though studies have failed to show this clinically.

Scientists across the board are concerned with the possible problems connected with prepubescent, chronic smokers and what effect even minor and reversible hormonal changes would have on their development. As yet there is little evidence to suggest any great problems in this area, but there is general agreement that this situation requires further study.

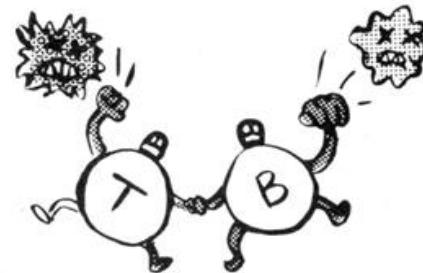


CELL AND CHROMOSOME EFFECTS: The numbers and kinds of chromosomes—structures in a cell nucleus which contain and transmit genetic information carried by DNA—are characteristic for a given species. Structural variation and changes in the numbers of chromosomes may be evidence of genetic damage due to drugs or other chemical agents. While there have been studies which indicate that tar found in marijuana smoke can

inhibit cell division in certain types of cells, there have been fairly conclusive studies made which indicate that marijuana does not break chromosomes.

Studies that do indicate chromosomes have either been conducted on lab animals—using doses of THC which were larger than humans could conceivably take—or on multiple drug abusers, and those results "may be due to other factors associated with a life of heavy drug use."

THE RELMAN REPORT—a government-sponsored study of marijuana and health conducted in 1980 to 1981 to review all then-existing marijuana research—concludes that "the weight of evidence from human studies indicates that neither marijuana nor THC causes chromosome damage."



THE IMMUNE SYSTEM: The immune system functions in protecting the body against viruses, bacteria, poisons and other infections. It also plays a major role in preventing the growth and dissemination of cancerous cells. The primary components in the system are two active white blood cells (T-cell and B-cell) and macrophages. B-cells identify specific body enemies and produce antibodies to chemically disarm them. T-cells consume viruses, poisons and cancerous cells. The primary job of macrophages is to stop anything breathed in that could cause disease by absorbing it. Both the T-cell and macrophages grow as they consume, and they divide when they have reached their size limit, creating more of themselves.

Any inhibition of these functions, either in identification, consumption or creation of antibodies to fight off the invading agents, is called an immuno-suppressive effect. The body simply isn't handling the problem.

Some early studies in this area indicated that the T-cell's ability to divide was inhibited by THC, though these studies were conducted only in the laboratory. Later studies have shown a weak immuno-suppressive effect in macrophages, though these

effects varied from subject to subject and were regarded as transitory. That is, shortly after smoking, while there was a high concentration of THC in the body, there was a measurable change; the response returned to normal as THC levels dropped.

More recent studies, conducted by Munson and Fehr, conclude that marijuana reduces resistance to infection but acknowledged that this change would vary from person to person and would most often be minor: "It is likely that we would now be aware of profound changes in the resistance of humans if they occurred frequently. But even minor effects would be significant among those with immune disorders or with immunity otherwise suppressed."

On this last count, there is some concern from several quarters. Even minor changes in immune response have to be looked at critically in the light of the current AIDS epidemic, *not as a cause by any stretch of the imagination*, but simply because it is an area which has not yet been researched.

This is not a cause of concern for the user. It is only mentioned because a number of scientists feel that any drug which relates, even mildly, to the immuno-suppressive response cries out for research in view of this new problem.

PREGNANCY AND OFFSPRING



Early reports which tied cannabis use to birth defects in humans on the grand scale—webbed feet, retardation, and so on—have been discounted by even the most anti-cannabis scientists. Those studies that reported these findings generally dealt with lower-economic groups who practiced poor nutrition, drank heavily and were often multiple drug abusers. Even then, such major birth defects showed up with such rarity that few people took them seriously.

The reality is that while there are some effects to the offspring of both

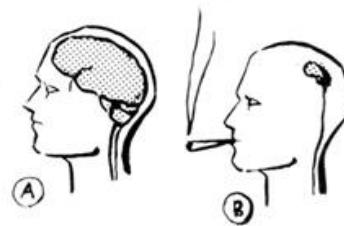
humans and animals from cannabis use—generally from cannabis use—generally from pure THC—the changes are not very dramatic. Saraseth, Carol Grace Smith, Susan Dalterio and Peter Fried, among others, have found unhealthy changes in offspring of lab animals exposed to THC, but most of these involved short-term nervous disorders, aberrant visual attention spans, lighter birth weights and shorter gestation periods. Radical doses of THC have had greater effects, but only in lab animals and these did not correspond with human test results. Of the above mentioned researches, all but Dalterio agreed that offspring whose mothers were exposed to cannabis or THC caught up with nonexposed offspring within thirty days after birth. Dalterio's work deals with second generation mice, and her early results—roundly disputed—suggest that fertility and hormonal production can be affected in those second generational lab mice.



Dr. Peter Fried, a leading researcher in the field who works with human offspring, says, "There are no major effects to offspring when marijuana is used in conjunction with good nutrition during pregnancy. Marijuana has been used by middle-class women very comfortably during pregnancy since the '60s. If there were any major effects they would have been noticed by now. But that doesn't mean that there aren't subtle effects that might be important." Those effects include "a significant increase in symptoms associated with nervous symptom abnormalities which might indicate a mild form of withdrawal... the optimum condition is for a pregnant woman not to use any exogenous agents at all."

Because THC is known to cross the placenta and to be found in breast milk, and because the effects—even minor effects—are not fully understood, this sentiment is generally echoed in the scientific community; use of cannabis by pregnant women is not recommended.

THE BRAIN



Despite two outlandish studies published in the 1970s which concluded that marijuana caused brain atrophy, researchers universally agree that there is no evidence that cannabis causes structural changes in the brain. On the other hand, several teams of researchers have found changes in the brain's electrical activity in human beings during the most active periods of THC action. These changes diminish as the effects of the "high" wear off.

More to the point are the chemical changes marijuana causes, since these changes are what produce the "high," and the issue of accumulation. Most researchers agree that while THC in minute doses remains in the brain for some time after smoking, it is neutralized. New studies have found traces of subcortical activity, presumably related to marijuana use and isolated to that use, long after the "high" has worn off.

Reese T. Jones had written in 1980, after much study, that "the weight of evidence [indicates] that lasting neurophysiological impairments are possibly, but not inevitably, associated with some undetermined level of heavy, prolonged marijuana use." Dr. Jones was one of the members of the Relman Committee, and when I spoke with him recently about his 1980 findings he said, "The conclusion of the National Academy of Science group—the Relman Report—was that not all the answers were known but that one should not be complacent and assume you're gonna get away scot-free. They were a very good group of researchers, most of whom had no axe to grind about marijuana. It's a very complicated drug, or series of drugs and there's so much we don't know."

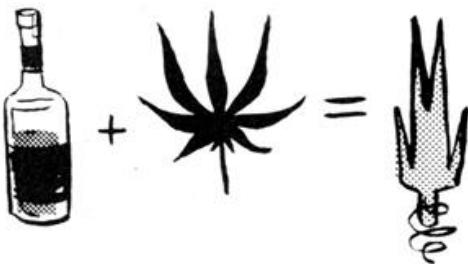
Several other scientists I spoke with felt the same way. The brain is very complicated, and the effect of cannabis on it is not fully understood. Subtle changes invisible to testing methods may occur. Gilekson, making a humorous report to a Senate subcommittee in 1980, concluded, "Marijuana may not lead to death, but

it might reduce the chronic smoker to mediocrity."

Still others are not convinced that there is any evidence to support the idea of accumulated toxicity or any other effects which are not entirely reversible once smoking stops. But even they would like to see more research money spent to study long-term effects to chronic, heavy smokers, and almost no one is willing to commit themselves to saying there are absolutely *no* lasting effects, because so much remains to be understood about how the brain really works.

No scientist of repute suggested any real hazards in this regard for the casual user.

PATTERNS AND BEHAVIORAL SYNDROMES



Although there is no evidence to suggest that a specific cannabis psychosis exists, there has been enough clinical evidence of negative behavioral patterns among chronic cannabis users for researchers to recognize the interaction of the drug with previously existing problems. In other words, psychological problems and psychiatric illnesses, while not necessarily caused by chronic smoking, can certainly be worsened by it, according to Rick Seymour, of the Haight-Ashbury Drug Abuse Clinic. These "long-term problems or situation—where marijuana is being used to self-medicate underlying psychological problems—call for appropriate counseling by health professionals."

Frequently discussed behavioral patterns among chronic smokers include:

• **Antimotivational Syndrome:** Characterized by apathy, loss of ambition, loss of effectiveness, diminished ability to carry out long-term plans, difficulty in concentrating and a decline in school and work performance. This syndrome may be seen in nonsmokers of marijuana, and even chronic use is not always associated with loss of motivation, but people experiencing these symptoms will, again according to Seymour,

"Probably worsen the situation by taking any sedating drug." Biologically, this syndrome does not exist, but, as Hollister, a reputable researcher notes: "One cannot help being impressed by the fact that many promising youngsters change their goals in life drastically after entering the illicit drug culture, usually by way of cannabis. With cannabis, as with most other pleasures, moderation is the key word." The problem, for the user, is to determine the difference between use and abuse.

• **Toxic Delerium:** Also known as acute brain syndrome, it is characterized by a clouding of consciousness manifested by impairment of ability to sustain attention to a goal or stimuli, changes in sleep patterns and sustained disorientation. These symptoms are found only occasionally, and then usually in long-term heavy users. Reese T. Jones has said, "Almost anyone given the right dose in the right setting can be made to exhibit a set of schizophrenic-like symptoms." Symptoms disappear with abstinence, provided there is no additional psychological or physiological problem.

• **Effects on Pre-existing Mental Illness:** Clinical, not biological, evidence suggests that in some cases—particularly patients with mood disorders and schizophrenia—may be negatively affected by smoking grass.

• **Flashback Syndrome:** While there is no biological evidence yet of a flashback syndrome, many researchers feel that there is a kind of *deja vu*—often relating to acute anxiety—that many marijuana users encounter. Mike Wizner of the Beverly Hills Detox Center, says he regularly treats people for these negative feelings, which in some cases can be quite severe whether chemically induced or not.

• **Affects on Aggression:** With the exception of the occasional rare individual with some special disposition to violence, every experiment conducted with cannabis has shown a decrease in aggression in the user.



ADDICTION:

Most researchers agree that addiction, literal and physiological, to cannabis can occur after an unspecified, long-term, heavy exposure to the drug. But withdrawal symptoms are very mild—slight depression, anxiety, possible nausea—and of very short duration—several days or less. Fear of withdrawal is not seen as a reason for continuing use. On the other hand, "You have the same sort of psychological syndromes you do with any other addiction," according to Dr. Norman Zinberg of Harvard Medical School's Department of Psychiatry.

Quantities of cannabis needed to attain addiction are nonspecific (varying from person to person) but because they are known to be high, the casual user does not run the risk of physical addiction.

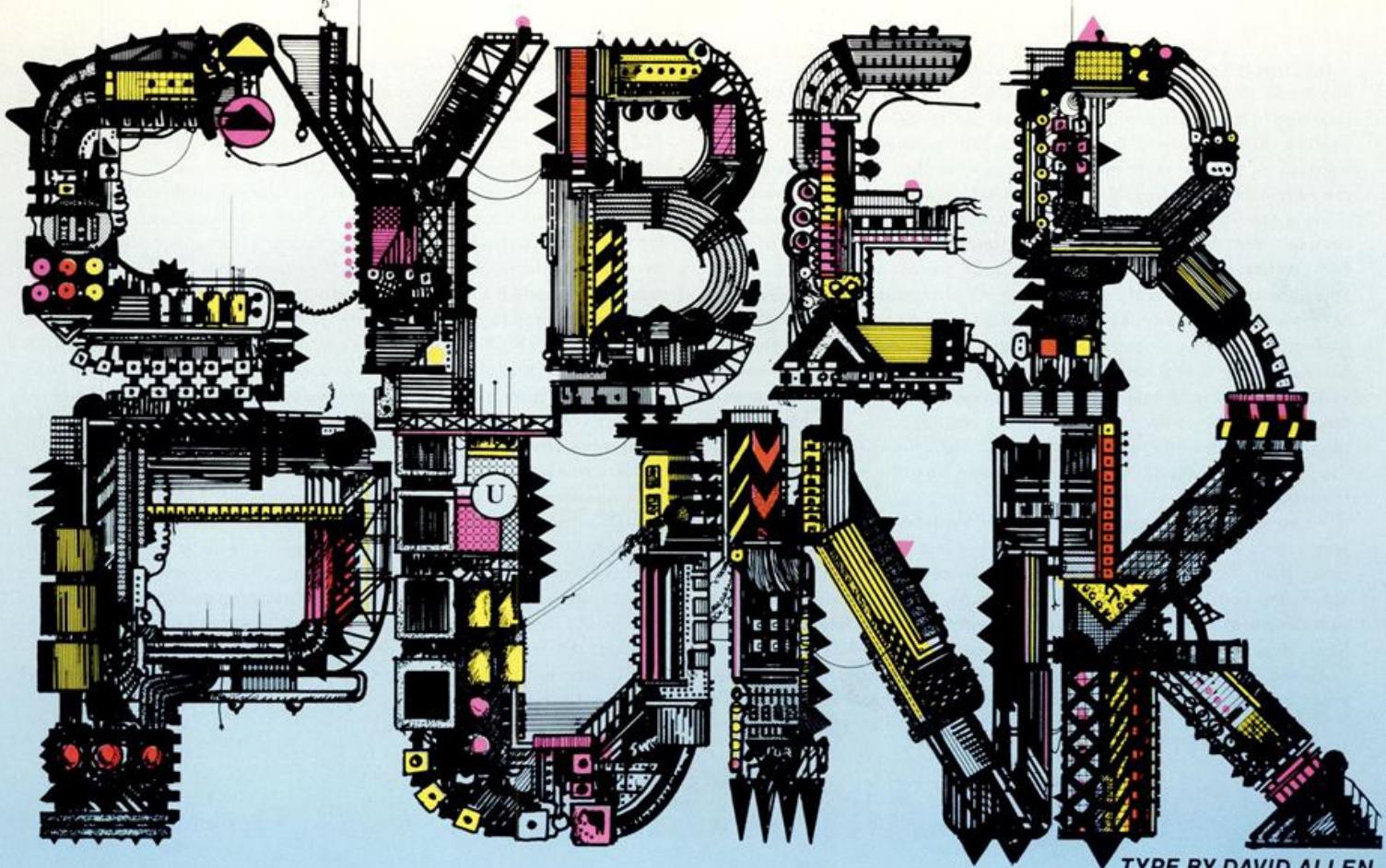
STEPPING STONE SYNDROME:

Marijuana use does not physically lead to the use of, or experimentation with, any other substances. Moreover, government studies indicate that changes in an individual's behavior start before drug use. On the other hand, clinical studies indicate that experimentation with one drug seems to open a gate for experimentation with others. According to the National Institute for Drug Abuse, those people who are going to have drug problems generally begin by drinking alcohol and smoking cigarettes, becoming addicted to one or the other of these substances, and then experiment with speed or cocaine.

CANNABIS AND THE DRUG ADDICT

Rick Seymour has been working for years with people who have drug related problems and has written extensively for a number of journals and magazines, including **HIGH TIMES**. When asked whether marijuana is harmful to addicts trying to stay clean, he says, "People who are getting off alcohol or other drugs are in a position of having to deal very carefully with what they are doing with their lives, from their diet to their behavior and so on. What happens when they smoke is that grass creates a sense of euphoria that reminds them of how nice it was to be loaded and there it goes. It's as simple as that. There could even be a physiological factor we don't know about... [smoking] does seem to contribute to relapses among addicted people."

continued on page 68



TYPE BY DAVID ALLEN

BY LOU STATHIS

CYBERPUNK, like most other labels, is a meaningless piece of conceptual B.O. (i.e., the guy who smells it gets to name it). Surgically created several seasons back by writer/editor/funnyman Gardner Dozois, the term was intended to monikерize the work of science-fiction hotshot William Gibson, whose audacious first novel of computer piracy, *NEUROMANCER*, was happily snorting up every award in the field. Natch, the handle stuck, and nowadays it gets trotted out whenever some young schmuck punches his way into a leather jacket and strolls down the SF pike. The merest whisper of this dreaded "C-word" now gives Gibson stomach cramps, though Cyberpunk writer and Minister of Propaganda Bruce Sterling still offers an equivocal embrace, mainly for its promotional value. I mean, loudmouth writers are like Shi'ite terrorists: one of 'em is just a nuisance, but a whole batch of the buggers babbling in unison is a movement, and we media swine sure do love movements.

Anyway, after some dutiful hogshit shovelling and ingestion of several core CP texts, one discovers that, hey!, maybe there's something going on here after all. Call it a new attitude, mindset, or

just a bogus pose—whatever, it's one refreshingly rank breeze blowing through the endlessly recirculated stale-air atmosphere of *semper fi* sci-fi.

It's kind of like the state of rock'n'roll in 1975, when the ground was ripe for the hun-plundering led by Malcolm McLaren and the Sex Pistols. Likewise, science fiction was ready for the raiding party of the neotraditionalist cyberpunks in the early eighties; guys who would strip the SF impulse down to its essentials and retool it for more effective operation (unlike the village burners of the sixties SF "new wave," who tried to trample everything in sight). Strategically, the procedure goes like this: First, crank up the intensity level to kick-ass volume, then abuse the chromosomal structure with brain-twisting doses of weird techno-voodoo chemical extracts, and finally, route the whole howling mess through a neural network of pirated biochips. The end result is still recognizably science fiction, but like any evolutionary leap, it has caused a strange, magical transformation—one that perhaps could've been anticipated but wasn't predicted. Basically, the "literature of the future" has been yanked out of the past with the crowbar of the present.

Isolating the precise essence of cyberpunk is a tricky business, because like the SF virus itself, it's continually reduplicating itself from the DNA up, changing to meet each new environmental challenge. Everybody's got their own two cents to throw in. Gibson talks about the generation of writers who were taking William Burroughs for granted when they were thirteen (and if you've read *NAKED LUNCH*, you know what a scary idea that is); while CP pioneer Sterling points to the bewildering transformations—mental and physical—that technology exerts on us; and goofball information theorist Rudy Rucker measures the data-density in CP prose. Founding zygote John Shirley summed it up best, with: "I think it's characterized by writers who have a global worldview; who write with an attitude informed by information arising from the so-called 'underground'; who write with a certain intensity of tone that's sometimes taken for punk; who are influenced by writers outside the SF genre, and by certain aspects of rock culture (the better aspects); who realize that anti-heroes are not really anti-heroic; who search for real honesty in characterization; and who write with a perspective of a new, constantly transforming, global flux of worldwide media/information/imagery."

Whatever. I'll let the ideologues duke out the definitions; the work, for its part, stands by itself. Gibson's small output—two novels and a handful of spoon-sizers—is a complex mash of Burroughsian lowlife, Chandlerian metaphor, and Lou Reed imagery. Both novels are deeply flawed, overdosed with sentiment and macho posing, but show a remarkable talent still in the larval stage. He's only just warming up. Bruce Sterling's 1980 *THE ARTIFICIAL KID* was his warm-up—perhaps the first cyberpunk novel published. His more recent *SCHISMATRIX* shines with a light spectrum all its own. It's

a densely thundering behemoth that shows both a speed freak's obsession with detail and an acidhead's transcendent scope. Sort of like a guy looking over a 70mm film frame with a magnifying glass. John Shirley's politicized *ECLIPSE* shows great progress from his energetic but immature early work—the hilarious *TRANSMANIA CON* and the wack *CITY COME A'WALKIN'*—but can't seem to get moving. That it's the first of a projected trilogy might have something to do with that. I still prefer his short stories (so far uncollected in book form). Rudy Rucker's work is completely insane, in a healthy, playful way. Try the recently republished *SOFTWARE*, and lay out for the sequel *WETWARE* (due next April), which by all accounts makes his previous work look Dick-and-Jane. K.W. Jeter ain't really a cyberpunk, but who cares, eh? His *DR. ADDER* is a viciously twisted, post-Philip K. Dick extravaganza (that unfortunately falls apart at the end), while *THE GLASS HAMMER* is less warped but more polished. Greg Bear's stuff ain't warped at all; it's more traditional SF speculation, but with a post-modernist's audacious edge. Try *EON*, *BLOOD MUSIC*, and the just-published *FORGE OF GOD*. Lewis Shiner's *FRONTERA* is okay, but his best work is still in front of him. And for a good overview, try the Sterling-edited anthology *MIRROR-SHADES*, which includes a good menu of cyberpunk shorts (though some of the more obvious core samples are excluded), as well as the compiler's definitive dogma-spiel and the yok-filled story, "Mozart in Mirrorshades," a collaboration between Shiner and Sterling that parades all the sick thoughts cyberpunks have lurking in their livers. Great stuff. Read it. Just sit back, crank up the new Skinny Puppy record on the headphones, and watch a new reality jack in. But remember: Tomorrow is a lot weirder than we could ever imagine it to be.

WILLIAM GIBSON INTERVIEW

WILLIAM GIBSON is the cyberpunk Manute Bol. Ludicrously tall (maybe six and a half feet), impossibly skinny, and with a spine curved by the brutal ravages of Terran gravity, he cuts not so much a dashing figure as a question mark. Though a lingering drawl betrays his rural Virginia upbringing, he parks himself these days in moist Vancouver, British Columbia, with his almost-as-skinny wife and a couple of papooses. Novel-wise his books include *NEUROMANCER*, the *CITIZEN KANE* of cyberpunk, and its sequel, *COUNT ZERO*, the, uh, *MAGNIFICENT AMBERSONS* of cyberpunk. His handful of short stories have been collected in *BURNING CHROME*. Most recently he's completed a screenplay for *ALIEN III*, about which he's been sworn to secrecy by producers David Giler and Walter Hill. "There's an implied world in the art direction of the first two movies," he says. "You can deduce a lot about what's happening back home. And in the third one, it turns out that it's more complex than one would have thought." Original director Ridley Scott and designer H.R. Giger are reportedly being sought, but nothing is yet confirmed. Gibson is now completing his third novel, *THE MONA LISA OVER-DRIVE*, which Bantam Books hopes to have out some time next year.

HIGH TIMES: There's a lot of drug use in your books. Was this wishful thinking on your part, or just a part of the world as you saw it?

GIBSON: Well, I don't know. When I first started writing this stuff—1981, I just thought it was part of the world. Looking back on it, it does look like wishful thinking. But for that matter, people having casual sex now looks like wishful thinking. I mean, sometimes the set changes faster than one can extrapolate.

What with all the anti-drug hysteria have you gotten much flak about it?

Not really. Mainstream science-fiction writers have put it down for being sort of a downer. They say, 'How can you be so negative about the future?' And I don't think I'm being negative at all—I think I'm wildly optimistic.

Well, your stuff is just basically ambiguous, the way the world is. It's a bogus issue, like whether you're anti-technology or pro-technology. I mean, technology is a fact of our lives, and it's transmuting us physically and mentally.

Yeah, it's like somebody coming up to you and asking, 'Are you pro-breathing or anti-breathing?'

Why do you bother writing science fiction, anyway? So much of it is such bogus garbage these days.

Well, I don't think there's any area of pop culture that's *innately* bogus. This so-called cyberpunk thing is kind of a roots movement. All these guys, who have nothing else in common, take this science fiction stuff quite seriously—more seriously than I do. But I think there's some part of myself that I seldom access consciously that really *loves* this stuff. Maybe I don't like the way it's usually played. I did come in from an angle of attack that was kinda like, 'Let's get this thing back on track.'

Did you go about it with a conscious game plan?

Pretty much. I set out to do certain things backwards. I had a sense of what the expectations of the SF industry were in terms of product, and I reversed them. I hated what was going on so much, that I just turned it around.

Like, instead of male lead characters who were macho competent men, you gave us Case in *NEUROMANCER*, who's something of a pathetic loser? You said in another interview

that when you were writing *NEUROMANCER*, you were conscious of accessing the fucked-up adolescent in you—was that Case?

Well, yeah, that was quite conscious—that's my teenage book. It's not autobiographical in any sense, but the characters are drawn out of my sense of what people like that are like. It's about this huge unfocused angst, combined with a kind of lack of affect about the real horrible shit that's happening around you. Something I've seen in a lot of people.

And what about Molly, the tough little hit-dame who saves Case's butt? She also a reversal?

Well, actually she's more a cop from Howard Hawks (acclaimed director of such films as *BRINGING UP BABY*). And she's, as far as I can tell, the real popular thing about the book—she's the one people dress up like at science-fiction conventions.

Really? That must be spooky, like seeing your bad dreams come to life... *NIGHTMARE ON GIBSON STREET*...

Well, that's one of the scary things about writing. When I do this stuff, I feel like I'm dangerously close to inventing reality; because often if you write about something, you do run into it later. It's enough to make you careful about what you're creating.

Any other SF expectation you were playing with?

Well, I wanted it to be really impossible, in terms of textual evidence, for anybody to determine that the United States still existed as a political entity. It's not even that you can't tell who's running the country—you can't even tell if it's a country.

Which is a given in so much American science fiction.

Yeah, in most American SF, America is the future, and that's rubbed me the wrong way for a really long time.

Okay, we've been spending a lot of time badmouthing science fiction—there must be something good about it.

Well, I know it had a liberating effect on me when I was a teenager. I have never forgotten that SF in the early sixties was the sole source of subversive information that I had. I was iso-

PHOTOGRAPH BY ALEX WATERHOUSE-HAYWARD



lated—but so are most people to one extent or another—and here are all of these crazy, monstrous souls writing this stuff (or at least half a dozen of them were). It attuned me to all the strange data coming in from outside, and it's really still enough of an oddball community to keep my interest.

Are there any other SF writers who still excite you?

Well, Bruce Sterling is still my favorite. I mean, he's got so many ideas per page that, you know, hundreds of other SF writers could subsist in a parasitic relationship with his ideas for a decade. And Greg Bear, who is seriously into science in a way that I'm not. That still has the capacity to chill me. And I really liked a book by Marc Laidlaw called *DAD'S NUKE*—and he's actually young; he might even be under thirty. But, I think the favorite stuff that I've read lately are two books by a guy named Madison Smartt Bell, *THE WASHINGTON SQUARE ENSEMBLE*, and *WAITING FOR THE END OF THE WORLD*—brilliant books. And the guy is really lucky he didn't get stuck being a science fiction writer, because the books have all the elements of that kind of fiction.

Which is...?

I see these guys basically as the children of (Thomas) Pynchon, I think he was the start of all that—

You mean like *RUBICON BEACH* by Steve Erickson, *EASY TRAVEL TO OTHER PLANETS* by Ted Mooney, and *FISKADORO* by Denis Johnson—this mutant breed of near-SF, crossed with surrealism, realism, and pop culture imagery?

Yeah, I think if you went and met those guys, they all would have turned out to have read *GRAVITY'S RAINBOW* a couple of times and been very much influenced by it.

Yeah, and maybe they read SF when they were 12, but haven't touched it in 15 years.

Well, I don't know—I read an essay by Pynchon in the *Sunday Times Book Review* a couple of years back, and he said something about the basic wonderfulness of science fiction. I'll bet he sits around and reads it for pleasure.

You really think so? How embarrassing—that's like someone going through your underwear drawer...

I don't know—we all have these weird hungers that culture and subculture lay on us at an early age. These guys probably all read the crappy SF that I

continued on page 72

the silver walks

BY WILLIAM GIBSON



She'd had this friend in Cleveland,

Lanette, who'd taught her lots of things. How to get out of a car fast if a trick tried to lock the doors on you, how to act when you went to make a buy. Lanette was a little older and mainly used wiz, she said, "to move the down around," being frequently downed-out on anything from endorphin analogs to plain old Tennessee opium. Otherwise, she said, she'd just sit there twelve hours in front of the vid watching any kind of shit at all. When the wiz added mobility to the warm invulnerability of a good down, she said, you really had something. But Mona noticed that people who were seriously into downs spent a lot of time throwing up, and she couldn't see why anybody would watch a vid when they could stim just as easy. (Lanette said simstim was just more of what she wanted out of.)

She had Lanette on her mind because Lanette used to give her advice sometimes, like how to turn a bad night around.

Tonight, she thought, Lanette would tell her to look for a bar and some company. She still had some money left from her last night's work in Florida, so it was a matter of finding a place that took cash.

She hit it right, first try. A good sign. Down a narrow flight of concrete stairs and into a smokey buzz of conversation and the familiar, muted thump of Shabu's "White Diamonds." No place for suits, but it wasn't what the pimps in Cleveland called a spot, either. She was no way interested in drinking in any spot, not tonight.

Somebody got up from the bar to leave just as she came in, so she nipped over quick and got his stool with the plastic still warm, her second sign.

The bartender pursed his lips and nodded, when she showed him one of her bills, so she told him to get her a shot of bourbon and a beer on the side, which was what Eddy always got if he was paying for it himself. If somebody else was paying, he'd order mixed drinks the bartender didn't know how to make, then spend a long time explaining exactly how you made the thing. Then he'd drink it and bitch about how it wasn't as good as the ones they made in L.A. or Singapore or some other place she knew he'd never been.

The bourbon here was weird, sort of sour but real good once you got it down. She said that to the bartender, who asked her where she usually drank bourbon. She told him Cleveland and he nodded. That was eth and some shit supposed to remind you of bourbon, he said. When he told her how much of

her money was left, she figured out this Sprawl bourbon was expensive stuff. It was doing its job, though, taking the bad edge off, so she drank the rest and started in on her beer.

Lanette liked bars but she never drank, just Coke or something. Mona always remembered one day she'd done two crystals at the same time, what Lanette called a two-rock hit, and she'd heard this voice in her skull say, just as clear as that, like it was somebody right in the room: *It's moving so fast, it's standing still.*

And Lanette, who'd dissolved a match-head of Memphis black in a cup of Chinese tea about an hour before, did half a crystal herself and then they'd gone out walking, just ghosting the rainy streets together in what felt to Mona like some perfect harmony where you didn't need to talk. And that voice had been right, there was no jangle to the rush, no tight-jawed jitter, just this sense of something, maybe Mona herself, expanding out from a still center. And they'd found a park, flat lawns flooded with silver puddles, and gone all around the paths, and Mona had a name for that memory: The Silver Walks.

And sometime after that Lanette was just gone, nobody saw her anymore, and some people said she'd gone to California, some people said Japan, and some people said she o.d.'d and got tossed out a window, what Eddy called a dry dive, but that wasn't the kind of thing Mona wanted to think about, so she sat up straight and looked around, and, yeah, this was a good place, small enough that people were kind of crowded in but sometimes that's okay. It was what Eddy called an art crowd, people who had some money and dressed sort of like they didn't, except their clothes fit right and you knew they'd bought them new.

There was a vid behind the bar, up over the bottles, and then she saw Angie there, looking square into the camera and saying something, but they had the sound down too low to hear over the crowd. Then there was a shot from up in the air, looking down on a row of houses that sat right at the edge of a beach, and then Angie was back, laughing and shaking her hair and giving the camera that half-sad grin.

"Hey," she said to the bartender, "there's Angie."

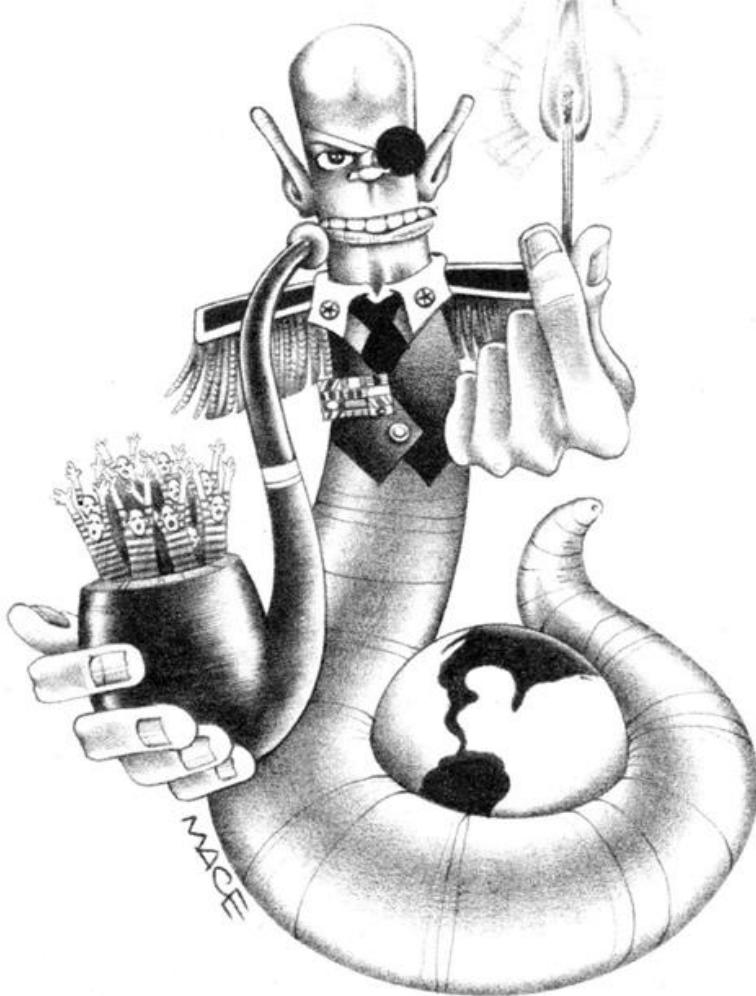
"Who?"

"Angie," Mona said, pointing up at the screen.

"Yeah," he said, "she's on some designer

continued on page 86

ILLUSTRATION BY ROYO



UNMASKING THE COCAINE CONTRA CONNECTION

BY JOEL MILLMAN

ART BY LENNY MACE

Three ex-drug smugglers, all currently in jail, have given testimony to federal officials that links the Nicaraguan Contras to illegal arms and drug shipments that go back at least to 1983, and may have been conducted under the direct supervision of officials of the United States government. The three, currently incarcerated in a Miami Correction Center, first made their charges public at the beginning of this year.

According to George Morales, Gary Betzner and Michael Tolliver, the trafficking consisted of ferrying arms shipments to Contra supply depots in Honduras, El Salvador and Costa Rica, then returning cargoes of illegal drugs to the United States. The arms-for-drugs operation also offered the pilots the option of "freelancing," that is, running their own shipments of drugs up from Central and South America as an additional payment for making the arms runs. The three say they believe both ends of their missions were sanctioned by federal authorities.

Of the three, George Morales may be the most important witness. Morales, a Colombian national, came to the drug smuggling business after a successful career in sports. A three-time offshore power boat champion, Morales broke speed records for ocean racing, at one time winning \$500,000 in prize money for powering a catamaran with four 635 horsepower engines from Miami to New York in just under 20 hours. That same resourcefulness, federal agents say, was applied to narcotics trafficking, with Morales earning profits into the billions of dollars by acting as a conduit between the so-called Medellin cartel in Colombia and traffickers in Florida. According to court documents, Morales directed the movement of dozens of smugglers, arranged the recruitment of pilots, the purchase of planes and the disbursement of tons of marijuana and cocaine

from his hangar at the Opa Locka airport northwest of Miami. In 1983, he says, he began arranging arms shipments for the Contras.

"I was the president of the company," he says. "I arranged for the flights and got the pilots." One of his pilots, Gary Betzner, was instructed in May 1983 to fly a blue and white C-47 out of Opa Locka. Betzner says when he arrived at the hangar he saw Morales helping to load several tons of grenade launchers into the aircraft. Betzner was told to fly to the Ilopango Airbase in El Salvador, then the hub of the U.S.'s military operation in the region, after first stopping at the U.S. Naval Air Station at Boca Chica, just east of Key West, where six nautical mines were loaded onto the plane. Betzner says it was after midnight when he arrived at Ilopango.

"They asked us if we wanted to go into town to the Sheraton after we unloaded," says Betzner, adding that he and his co-pilot declined the offer, planning instead to fly a second leg of the journey as soon as their craft was refueled. He says Salvadoran military personnel unloaded the weapons and mines, while an American civilian known to him only as "Sam" met the pilots with a tube of maps and other instructions and directions to fly to Colombia to pick up additional cargo. That cargo, says Betzner, was 6,000 pounds of marijuana, to be delivered to the Bahamas. The C-47 made the pickup and met up with Morales at Great Harbor Key in the Bahamas later that day. From there Morales made his own arrangements to deliver the drugs to Florida and returned with Betzner to Opa Locka.

The May 1983 flight was one of nearly two dozen such trips Morales says he arranged for the Contras. Even after Congress cut off military aid to the rebels, Morales says he continued to supply weapons, instructed by CIA operatives in Costa Rica. In the summer of 1984, Morales told Betzner to make two more flights, both to an airstrip in northern Costa Rica on a farm owned by an American expatriate named John Hull. Hull, widely reported to be a link between the Contra rebels and the secret White House supply network, has also been the focus of other drug investigations. Betzner says he first flew to Hull's airstrip in August, 1984, bringing 2,000 pounds of ammunition from Ft. Lauderdale. He says he met with Hull and two associates on the first trip, and on both occasions returned to Florida with a cargo of cocaine. Morales says he made large cash payments to Hull for the use of the airstrip.

Most troubling about Betzner and Morales' testimony is that it was apparently available to federal authorities for some time, months if not years, before either man began speaking to the press. Betzner, who was arrested and jailed on separate charges in 1985, appears to have rather limited knowledge of the Contra-aid network. Even though Morales has said repeatedly that he has shared his knowledge with FBI and Drug Enforcement Administration agents in South Florida, he has still not been charged with any violations relating to his Contra activities. Morales was scheduled to go to trial earlier this year on charges of drug smuggling related to a Quaaludes bust in 1984, and a 1986 charge of conspiracy in smuggling cocaine from Costa Rica to the Bahamas. He says the arrests came long after he agreed to help re-supply the Contras and just a month after he says he met with representatives of the vice president's anti-drug task force. At that meeting, he says, he was offered immunity for any smuggling he may have been involved with between 1980 and 1986, in exchange for his continued support of the supply operation. Ironically, Morales said he planned to subpoena Vice President George Bush, as well as Secretary of State George Shultz, while using a national security defense in the trial. His attorney promised to subpoena records from the CIA, DEA and National Security Council that he said would help clear his client, but, the day after the trial began, Morales copped a guilty plea in exchange for a sentence that may run as long as twenty years. The plea has not changed the statements Morales made about his work with the Contras. Morales said he agreed to the plea after federal authorities threatened to indict his wife and link her to his case.



In assessing Betzner and Morales' statements, caution should be observed. Both men, convicted felons, so far have only each other as corroborating witnesses (Betzner says his co-pilot on the flights to Ilopango, Richard Healy, was killed in a plane crash in Colombia in 1985), and prisoners often try to use the media to harass prosecutors or others they perceive as enemies from behind bars. Justice Department officials in Miami do have options in dealing with witnesses like these. They can ignore them or they can attempt to get their testimony on the public record by convening a grand jury to investigate the allegations and give the witnesses immunity to testify before that panel. So far the Department's position has been to dismiss the pilots as noncredible, suggesting that their stories are fabrications derived from the spate of newspaper stories about Contra drug trafficking that have emerged as a result of the Iran-Contra scandal. According to this scenario, Betzner and Morales are hoping to use Congress' growing interest in the Contra-aid network for some future gain. "These individuals are selling a story to Congress and the media that they have concocted to have their sentences reduced or have their cases dismissed," says Bill Yout, a spokesman for the DEA in Miami. "They had plenty of opportunities to tell their story in court and none of them did."

That argument is weak. Morales, long before he agreed to plead guilty in his case, made it clear that he *would* tell his story in court. In Betzner's case, as with the third pilot, Michael Tolliver, neither man was charged in connection with his supposed Contra supply runs, so should not have been expected to offer information about other crimes while their cases were proceeding. In Tolliver's case the argument that the witnesses are playing for assistance from Congress is weakened further by the fact that Tolliver is likely to be released from custody long before Congress completes its

work on the Iran-Contra case. Tolliver, with a relatively short sentence of 30 months following his own guilty plea in a conspiracy case, expects to be released on parole later this summer. "I don't really care if people believe me or not," he told the *Village Voice*. "In fact, I didn't have anything to say at all about this until I was asked by reporters, who said they got my name from other sources. I said I would wait until I was sentenced, after that I felt, 'why not'?"

Tolliver says he was contacted and asked to make arms-for-drugs flights in the summer of 1985, and that he made two runs in 1986. He did not work with either Morales or Betzner in supplying arms to the Contras, although he says he learned of the Contra drug network as early as 1984 while in prison on an unrelated charge in Georgia. Both of his flights involved moving arms to Contra bases in Honduras. In May 1986, Tolliver says he was instructed to fly a DC-6 loaded with weapons from Miami International Airport to the Contras' main supply base at Aguacate. He says he had a three-day layover in Tegucigalpa, where his plane was reloaded with 25,000 pounds of marijuana. Tolliver's return flight took him to Homestead Air Force Base south of Miami, where he says he left the plane and the marijuana and took a taxicab to the Fountainbleau Hotel in Miami Beach. The next day he picked up \$75,000 in cash, then returned home to Atlanta, where he says he was called three times over the next two months and kept advised of upcoming supply missions.

Tolliver says his second flight occurred in July, this time out of Haiti, where he says he took a DC-3 to Aguacate, then flew south to Colombia and loaded on a mixed cargo of marijuana and cocaine. The DC-3 was left in the Bahamas, but Tolliver says he was never paid for the arms shipment, and soon lost contact with the network. He says he also made a refueling stop on a flight from Colombia, touching down at Hull's airstrip in Costa Rica. Tolliver identifies Hull as a major player in the drug trade, although he says he does not know about Hull's Contra connection, specifying that his trip to the airstrip was not related to arms shipments for the Contras. Moreover, Tolliver identifies two men linked to the Contra supply network as his own contacts. A man who called himself Eduardo Hernandez, who Tolliver now believes is the same Max Gomez who ran the resupply depot at Ilopango, met with Tolliver in Honduras; and a second Ilopango operative, Rafael Quintero, met with Tolliver in South America. Both men are Cuban-Americans with long-standing ties to the U.S. intelligence community. Both are now fugitives.

Tolliver says since he has gone public

there has been no effort by federal prosecutors to contact either his lawyer or himself to have him testify under oath about what he knows about the Contra supply network. "The federal authorities are suppressing this information," he says. "Because it's true. Look, arms cost money, lots of money. The most readily saleable commodity is drugs. So they use people who already have an existing network and mechanism for selling drugs, that is, drug pilots. We take the arms down and bring the drugs back. Ed Meese should be in here with us."

The failure of Attorney General Meese's prosecutors in Miami to call any of these pilots before a grand jury fits a disturbing pattern of behavior that has come under scrutiny ever since charges of Contra arms and drug smuggling were first raised. Leon Kellner, the head of the Miami office, has seemed less than eager to pursue charges that the Contras and their supporters have violated neutrality and arms export laws and has only begun in the last six months to bring witnesses before a grand jury. That panel is looking into arms-trafficking allegations that go back more than two years. Morales, for his part, says his activities were well known to federal authorities after an informant told FBI agents about his arms purchases in 1985. Betzner says he saw Morales meeting with DEA agents that same year, which he says suggested to him that their smuggling activities were being sanctioned by federal authorities.

But the position of Kellner and his staff has been to discount the testimony of the MCC pilots, even to the extent of implying that by making their statements Morales, Betzner and Tolliver may be obstructing justice by tying up resources needed for more legitimate investigations. "It's a very frustrating thing," Kellner told the *New York Times* last February, "because the work I have been trying to do in the area of narcotics is being impaired."

The treatment of the Morales-Betzner-Tolliver revelations may be reduced to the issue of whether or not Justice Department officials—or for that matter, reporters—should believe the statements of convicted felons. Testimony from such "tainted" witnesses is frequently part of smuggling prosecutions, indeed there are virtually no drug cases made these days without the assistance of a confidential informant who may also be engaged in some criminal enterprise. But beyond the fact that prosecutors routinely grant immunity to witnesses in exchange for their testimony regardless of their own crimes, there are other hints that Morales and his associates have been snubbed by Justice. All three have been interviewed by Congressional investigators looking into the secret supply network; all three



are expected to testify before at least one of the panels probing the affair. Morales has already come before Congress' attention. In June 1986, six months before he began speaking to reporters from the MCC, Morales' name appeared on a list of possible witnesses compiled on a secret memorandum issued by staffers of the House Select Committee on Narcotics Abuse and Control. Also appearing on that list were the names John Hull and Frank Sturges, one of the Watergate defendants. At the same time, Morales is believed to be the "Colombian narcotics trafficker" mentioned in a State Department report last year who allegedly gave a plane to Contra leader Eden Pastora, presumably for use in arms and drug smuggling. Morales says, starting in 1984, he met frequently with Contra leaders Adolfo Calero and Alfonso Robelo. While both men strenuously deny they met with Morales or have any involvement with narcotics, Robelo, a former ally of Pastora, does acknowledge that he has heard allegations that Morales was linked to a former Pastora lieutenant named Adolfo Chamorro. Chamorro, believed to have acted as the go-between for Pastora and Morales, was deported from Costa Rica last year after charges he was involved in drug trafficking were raised there.

In the face of growing speculation about the Justice Department's mishandling of the Contra drug investigation, the Miami office is hunkering down. Numerous calls from the *Voice* to discuss the three pilots went unanswered. At the same time, it has not been possible to confirm whether any of the pilots have been offered immunity to appear before the grand jury. Even if the Department's mishandling can be attributed to caution, and not to a cover-up, disturbing questions have been raised by the Department's treatment of

a fourth witness, one who is not in jail, and who presumably carries none of the burden of credibility shouldered by felons.

Her identity and information about her background remain sketchy, as do the circumstances surrounding her willingness to testify about the drug business. But she has claimed to have worked for a number of years with top leaders of the Medellin Cartel, and reportedly has evidence that links the cartel's drugs to the Contra resupply network and the same Miami aviation company that many suspect has served as a "cut out" for US intelligence activities designed to circumvent the ban on aid to the Contras. Her code name is Wanda Doe.

By September Wanda Doe was meeting with investigators from Senator Kerry's staff, while his office began working with Justice officials in Washington on a grant of immunity. By this time Wanda Doe had already given information to FBI agents in Miami (her testimony is said to be contained in a file several inches thick), as well as offering a letter to Justice officials stating the nature of the information she was willing to disclose in return for immunity. At the request of William Weld, the chief of the local office's criminal division, Wanda Doe and her attorney prepared a nine-page proffer, offering even more detail about names and dates, flights and other information regarding the cartel's activities. "It's supposed to be a no-cost agreement," says Marc-Charles. "You take a witness' testimony, you get information and you sign an agreement that this testimony is not going to be used against her. I was naive. Little did I know in what disfavor the Justice Department was holding the Kerry people. This was a political hot potato."

But even Marc-Charles could not anticipate how much hotter things would get. As September eased into October, no decision had been made on immunity for Wanda Doe. There were politics being played on both sides now, with the midterm Congressional elections approaching, Justice was looking to protect the administration from any bombshell that would conclusively link the Contras to the drug trade; Senator Kerry's office was eager to nail down immunity for a witness who would bring new life to the year-long campaign to put Contra-drugs before a Foreign Relations Committee hearing. But when an unmarked C-123 was shot down in the jungles of southern Nicaragua on October 5th, Wanda Doe and her testimony was cast in a new light. The C-123, flown out of Ilopango by one of Oliver North's mercenary crews, suddenly made Wanda Doe more credible. And more dangerous.

continued on page 82

HIGH TIMES

PRESENTS

Chef Ra's

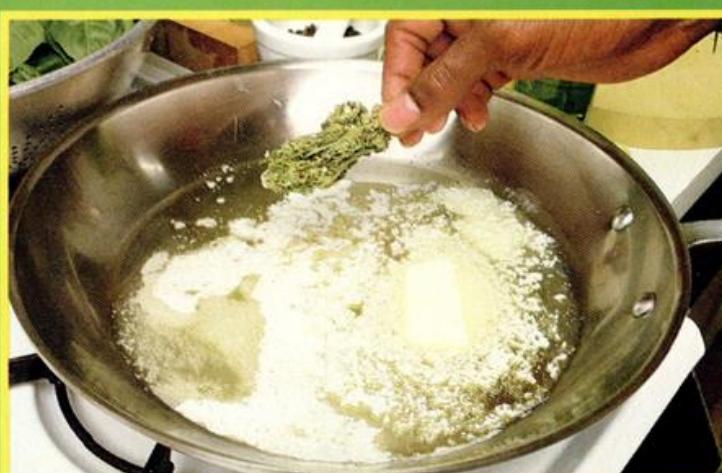
psychedelic

Kitchen

by Ra James

photos by
Andre Grossmann

Have you been looking the world over for just the right diet? Tired of fast food burgers and TV dinners? Then join the HIGH TIMES cross-cultural, revolutionary culinary movement!!



Ra can't wait to sample his puna butter stuffing, and it's no wonder, considering the green bud that went into it.



The Chef at home. Tie-dye apron by Paul Alexander. Chef's hat by Maggie and Scott at the Leather Shop, Champaign, Illinois.

RA cuisine is designed for the mind and body. The first step to a healthy diet is eating less prime rib and rich sauces and eating more veggies, fresh fish and fine green herb. So leave the Lean Cuisine in the freezer and get ready for the Rasta Pasta Pesto and Virgin Red Snapper!

Fire up the stove, heat up that ol' cast-iron skillet, cause Chef Ra is in town, and some jammin' cookin' is goin' down. The HIGH TIMES posse says, "Ra's gonna take you on a culinary trip: cuisine for the mind and body."

Chef's Note: Cooking with psychoactive substances takes a certain "spiritual" approach. The foremost goal is to get high safely and easily. Dosages should be limited to one or two joints per person. It's better to eat THC-loaded food first, and save the other food for last. The buzz takes at least $1\frac{1}{2}$ hours to kick in, so try and stay put. In other words, do not run errands, drive a car, or operate heavy machinery shortly after eating. And please be careful! The effect of eating herb is much, much stronger than smoking!! So let's get cookin', mon!



CHEF RA'S RASTA PASTA PESTO

- 1 Box pasta
- 4 cups of fresh basil leaves (washed and dried with paper towel)
- 1/2 cup of walnuts
- 1/2 cup of pine nuts
- 6 cloves of garlic
- 1 1/4 cups of olive oil



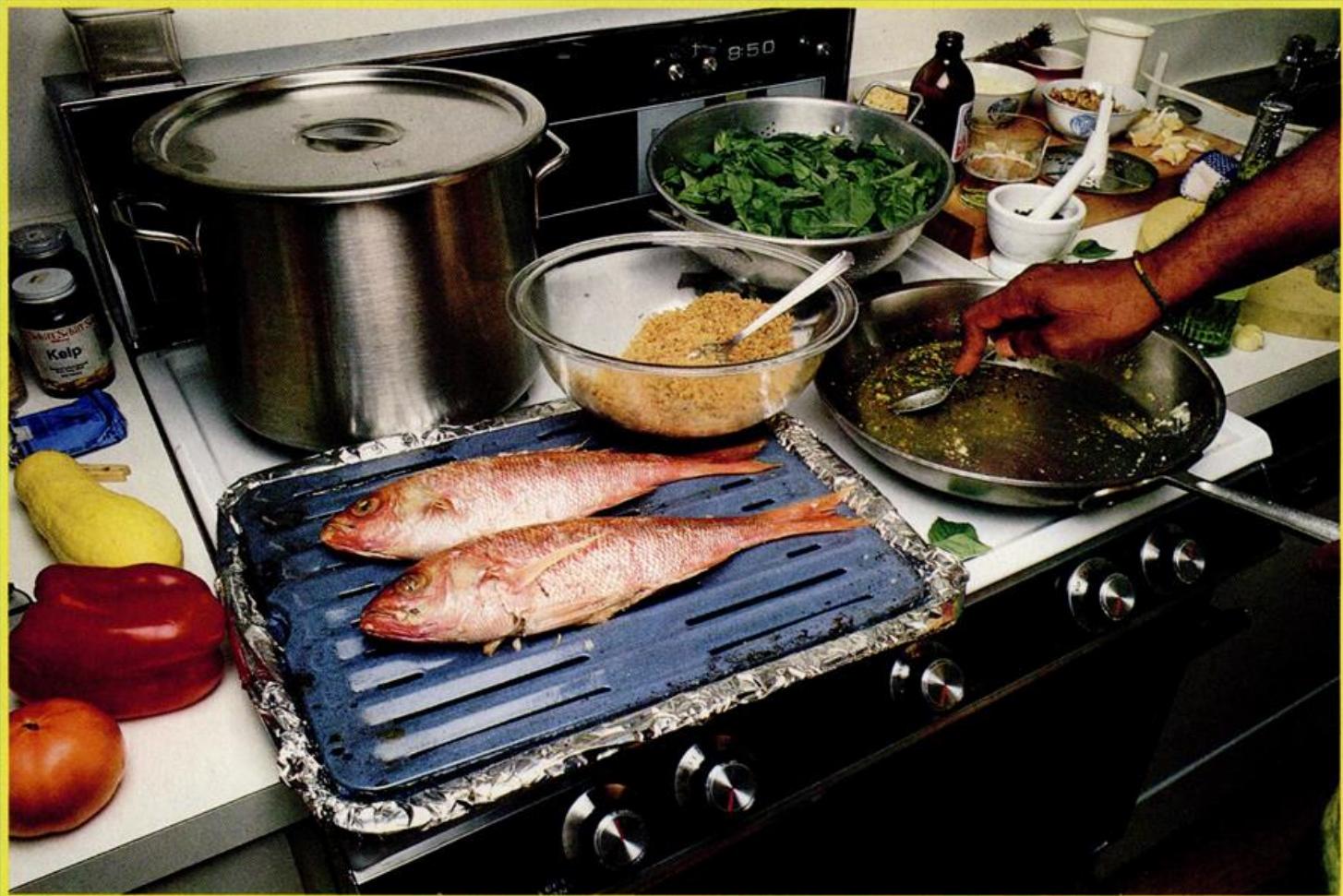
ANDRE GROSSMANN

1 1/2 cups of fresh parmesan
1/4 cups of romano cheese
1/4 ounce sinsi

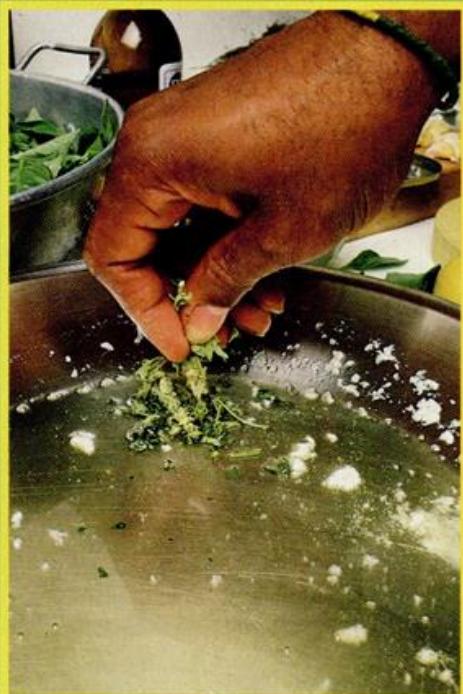
Combine basil, garlic, walnuts and pine nuts in a food processor and grind into a green

paste. Take a 1/4-ounce of sinsi and grind in a food processor. After grinding sinsi into powdery form, take an iron skillet, pour in 1 1/4 cups of olive oil and heat in the pan for 20 minutes, making sure not to burn the sinsi. Cooking assures the

transference of THC into the oil. Let the oil set until it is warm, mix everything in a bowl with the pasta. Add the Ra oil, cheeses, basil and pasta, tossing the RASTA PASTA PESTO to insure even distribution of the pesto in the pasta.



As the red snapper is being prepared for the oven, the chef carefully skims the foam out of the butter.



Grind the bud into fine pieces and add to the clarified butter. The better quality the bud, the better the dish. The effect of eating herb is much stronger than smoking, and also much more healthy for you.

CHEF RA'S VIRGIN RED SNAPPER

1 1/2 pound red snapper (one for each person)

2 tablespoons oil

1 lemon

1 tablespoon thyme

1 tablespoon basil

1 tablespoon parsley

**Add 1/4 oz. of fine green sinsi
(WITH THE PUNA BUTTER DRESSING)**

Take red snapper and brush with lemon juice. Add thyme, basil, parsley with the oil and brush the fish while cooking. Fish should cook about 15 to 20 minutes at 325° F.

PUNA BUTTER

Melt two sticks of butter in a frying pan. Add 1/4-ounce of sinsi, making sure not to burn the butter. As the butter begins to

boil, white foam and particles will come to the top. Skim the "froth" out of the butter. Make sure the pan is totally clean. Use salt and salad oil to scour the pan before melting puna butter. Metal oxides will blacken the butter and make it taste like metal! The butter should be of dark color and a butterscotch flavor. If you don't care to use the "cooked sinsi" in the bottom of the pan, then strain butter until all the "bud" particles are removed from the butter.

STUFFING

Heat up 1 1/2 sticks of butter using the puna butter method. Add butter to bread crumbs and 1 tablespoon each of thyme, basil, parsley, with 1 green onion. One-quarter cup of mushrooms will give the dish some color. Place stuffing in fish cavity. ●



INDICA bud has been known to move fast. Ask any dealer. But this bud comes direct from Humboldt County via **NINJA RACER**. That's why they call it...



...the world's fastest INDICA.



PHOTOGRAPHY BY ANDRE GROSSMANN

23

FERODO

FOX Ontario
moto tech corporation

MORIWAKI
CHAMPION





©1987, BY JOHN HOLMSTROM + AID MacSPADE - WRITTEN BY AID MacSPADE, DRAWN BY JOHN HOLMSTROM



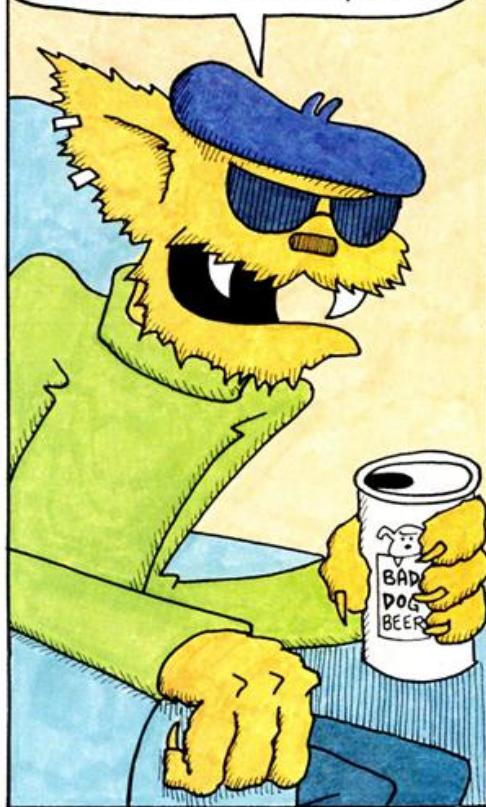
LATER



I WAS MINDIN' MY OWN BUSINESS- PLAYIN' WITH MY BALL OF YARN, WHEN ALL OF A SUDDEN...



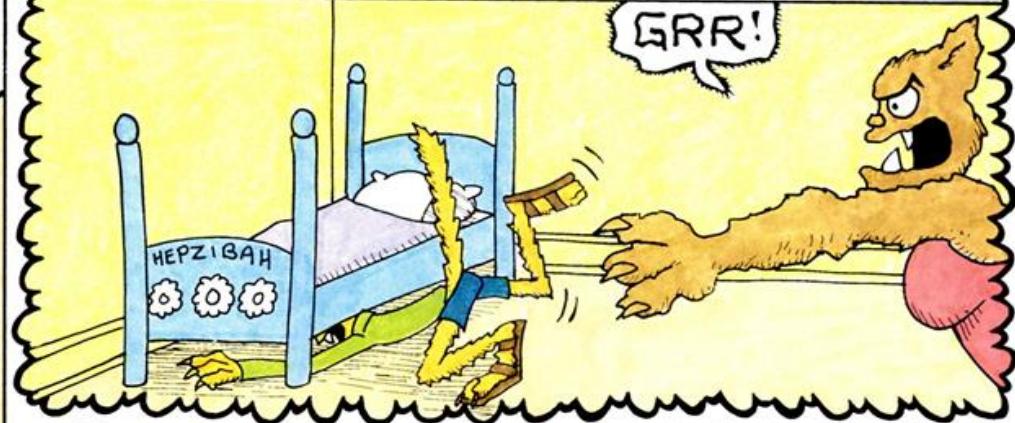
SEE, SHE HAPPENED TO BE WATCHIN' THE FIGHTS + DRINKIN' BEER- AND THE ONE THING SHE HATED-MORE THAN ANYTHING-WAS BEIN' INTERRUPTED DURIN' THE FIGHTS, SEE?



SHE CAME AT ME LIKE A MAD DOG!!
MEE-YOW!
I'LL GET YOU FOR THAT, YOU RAT!



IT WAS ALL I COULD DO TO GET UNDER THE BED IN TIME...



CLOSER + CLOSER SHE CAME! STOMP! STOMP! STOMP! AND, IN ALL THE EXCITEMENT, LEFT MY TAIL STICKING OUT FROM MY BEHIND!



SHE BIT OFF THE TOP OF HER BEER CAN- LIKE THIS! CHOMP!

YIPES!
CRUNCH
ZIP! ZIP!

THEN SHE GRABBED ME BY THE TAIL AND STARTED SAWIN'! IT WAS HORRIBLE, I TELL YA! ANNEN!



THAT'S THE END OF ROUND FOUR! AND IT LOOKS LIKE IT'S GONNA GO THE DISTANCE! IT'S TRULY THE FIGHT OF THE DECADE, FOLKS! AMAZIN'!



HIGH HURT



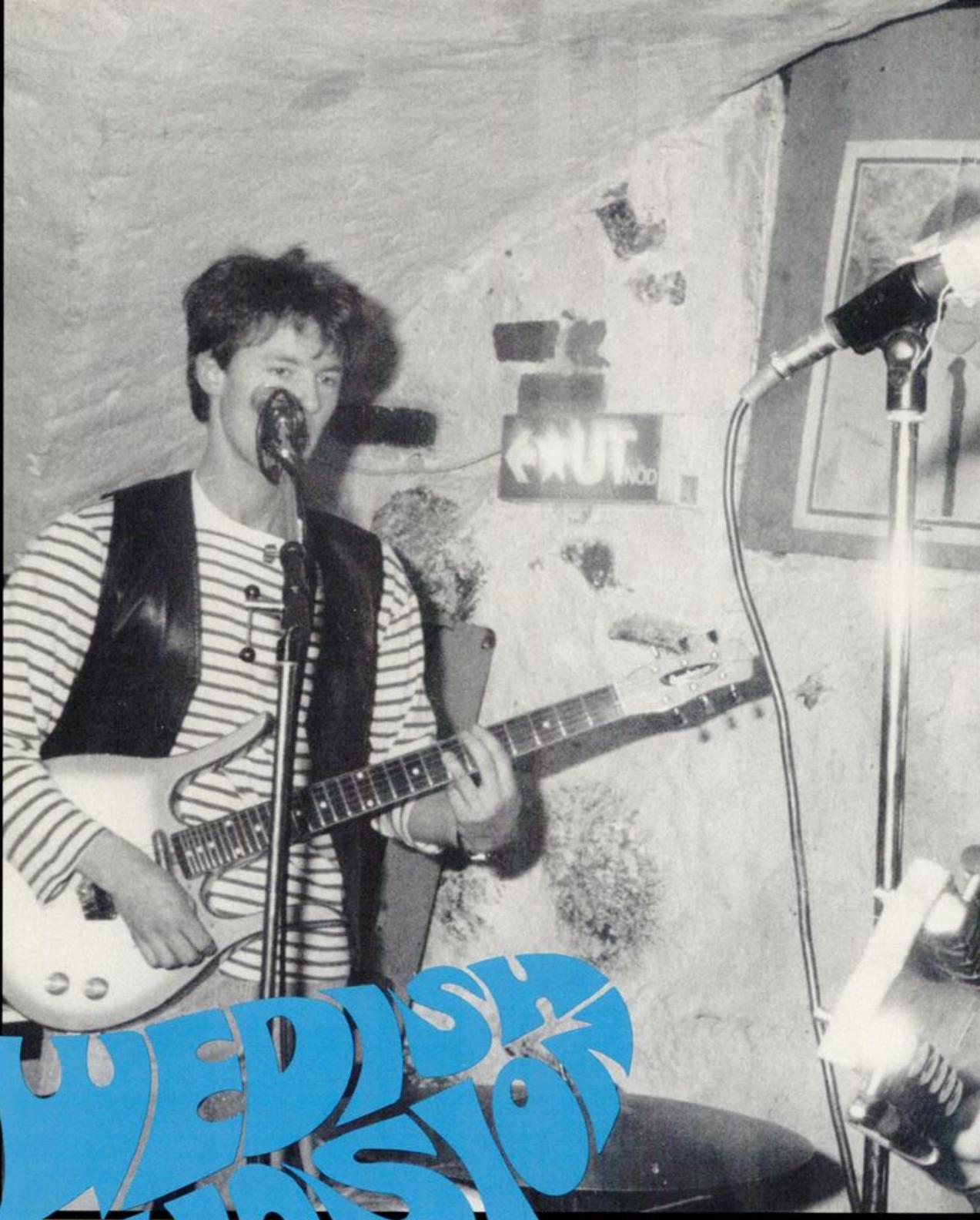
PHOTOGRAPHY BY JEFF VAUGHAN

IN THE DARKEST RECESSES of New York City, there are burrowed some of the most bizarre urban denizens to be found amongst the human species. Mighty among this odd lot is an elfin sort of hairy creature who is addressed by the noble name of AXEL. I am sure he is some tireless warlock torn from the gilded pages of an epic, medieval fairy tale. His craft looks like witchcraft, and one wonders whether he was once burned at the stake for cosmological heresy.

AXEL is an artist from the same gnarly mold as Dali and Giger, and an outlaw spirit as well; the eminent jeweler for the eminent kingdoms of the biker breed and rock 'n' roll. He mines precious metals from St. Peter's gates and fires them in Satan's furnace. This wizard artisan may be the sole possessor of lost secrets of psychoalchemy, a master of the grand illusion that transforms the dead back to life and recombines the remains of the ordinary into a new, mutant wildlife.

—Carlo McCormick

SWEDISH PASSION



● **Psychopunkadelia
takes root in Scandinavia**



by Michael J. Weldon

Believe it or not, the hottest music scene in the world is happening in Sweden. It might surprise you that the Scandinavian country that gave us Tor Johnson, ABBA, and meatballs, has an exciting band scene. After all, in the '70s, Sweden was best known for having the highest suicide rate in the world. But the music

The Wylde Mammoths were the first of the new Swedish bands to visit the U.S. Following true garage-band tradition, their first album was recorded at home on a two-track machine.

movement there is already being compared favorably with the late '60s San Francisco psychedelic scene, the early '70s Detroit sound, and the late '70s New York/London punk-rock scene. Since the music incorporates sounds and ideas from early psychedelic sounds, as well as early punk-rock groups, the term Psycho-punkadelia has

been coined to try and describe it. The single biggest influence on Sweden's current music scene is a mid-'60s garage band from Seattle, Washington called the SONICS. The SONICS were the wildest, raunchiest rock combo of all time, influenced early punk rock, and are also a major influence on modern American garage

rock. Many of the Swede band's singers have damaged their vocal chords trying in vain to duplicate the raspy singing style of SONIC's lead singer Gerry Rosalie. ("Garage rock," by the way, is a term for American rock bands in the '60s who were influenced or inspired by the British Invasion.)

The current music scene can be traced to 1981, when the NOMADS, from Solna, Sweden, released their version of the Sonics' "Psycho." Although the Nomads are still very popular, members of newer groups usually have rotten things to say about them because they "sold out" the '60s sound for a more modern/heavy style. Since the Nomads do mostly covers, their versions usually pale next to the easy to find originals.

The best Swedish garage groups are the STOMACHMOUTHS, the WYLDE MAMMOTHS, the LIVINGSTONES, and

the CREEPS. They all live in or near Stockholm, and the first three bands each include ex-members of the CRIMSON SHADOWS, who released two rare 45s in 1985.

The STOMACHMOUTHS are led by vocalist/guitarist Stefan Kery. Although his band has gone through major personnel changes, the current lineup has released an album called *In Orbit*. They have a very intense, traditional garage sound, highlighted by Kery's angry Sky Saxon-inspired vocals, and dominated by a SEEDS-style organ. The five original tracks, all written either by Kery or bassist Jens Linberg, sound kind of awkward. The best song on the album is "Hold Me Now" (written by the RUMORS), which ends in a psychotic freakout.

The WYLDE MAMMOTHS have a good chance of gaining a large American

following because their first album, *Go, Baby, Go!*, has been released on the Jersey-based Crypt Records (see *HIGH TIMES*, Feb. '87), and they successfully toured the States earlier this year in support of the record. The album was recorded in the basement of group leader/singer/writer Peter Manette on a two-track recorder. They do an excellent job playing a dozen original songs that resemble the best PRETTY THINGS songs. Vocalist/guitarist Peter Manette sounds a lot like Ray Davies on the very early KINKS records.

The MAMMOTHS' live performances were amazing, especially the rave-up at The Strip, a neo-psychadelic club on West 14th Street in Manhattan. Although there are a lot of good bands in the "Stockholm scene," most bands have to go to southern Sweden to find places to play. The MAMMOTHS hope to

A SHORT HISTORY OF SWEDISH ROCK MUSIC

BY MICHAEL J. WELDON

The roots of Sweden's music revolution started in the early '60s. Swedes took the British invasion very seriously, especially the music and long hair of the R&B influenced ROLLING STONES and PRETTY THINGS. The most successful '60s group, and the most popular among today's Swedish musicians, was TAGES, who later mutated into the very lush sounding BLONDE. Recently, double album career retrospectives, complete with rare singles and unissued tracks, of other pop groups like TAGES, the SHANES, and the HEP STARS, have provided a good history of popular Swedish beat music. Other bands from that time were the SHAKERS, OLA AND THE JANGLERS, and the NAME LOSERS. Considered one of the rawest-sounding Swedish bands, the LOSERS still play reunion gigs. They got their name after "losing" their original one, the BEACHERS, a combination of the BEATLES and the SEARCHERS.

As in America, the most outrageous, raunchiest bands never had hit records, and many never even got signed to record companies. In the tradition of the NUGGETS and PEBBLES albums, *The Continent Lashes Back Part 4*

(Sweden) and *Searchin' for Shakes—Swedish Beat ('65 to '68)* include many of the best songs by previously forgotten groups.

Although today's musical time warp Swedish bands are inspired by British and American '60s groups, and sing in English, they have their own beat groups to be proud of. Teenage bands call the '60s music their biggest influence, but most of them got started on the D.I.Y. (Do It Yourself) "nothing matters but rock 'n' roll" philosophy of the late '70s. The D.I.Y. attitude towards rock 'n' roll music inspires bands and artists to press their own records, start their own record companies, and take care of band business management. Late '70s punk never died, and is still inspiring groups everywhere, despite the fact that every other song on today's rock radio stations is sung by Phil Collins.

Swedes who care know that their first homegrown punk single, released in 1977, was "Raggare Is a Bunch of Motherfuckers!" by the RUDE KIDS. Raggare are Swedish car collectors who probably prefer '60s music themselves, but they tend to be fascist goons and were

known at the time for beating up punks. The RUDE KIDS had to be very discreet in public, and their lead singer was killed in a car "accident." PROBLEM, a band who recorded in Swedish, released their first single in 1978, and were still around in the early '80s. The most popular band from the punk days is LEATHER NUN, who've been recording since 1978, and are heavily influenced by the Detroit sound of the STOOGES and the MC5.

Look for new, or old, Swedish rock records in your local hip record stores and read about them in *NBT* (*The Next Big Thing*, 20 Albert Avenue, Grangemouth, Stirlingshire, FK3 9AT Scotland, \$5.00 for a sample copy), and *AFTP* (*Away From the Pulsebeat*, C.P.O. Box M1842, Hoboken, NJ 07030, \$5.00 for a sample). If you're interested in buying any of the new Swedish rock, but can't find it, send an S.A.S.E. to: Venus Records, P.O. Box 166, Cooper Station, New York, NY 10276. They'll send you a catalogue.

Thanks to Gunnar Johannsen (a prime move in the Stockholm music scene) for help, information, photos and posters.



H. ORRJE

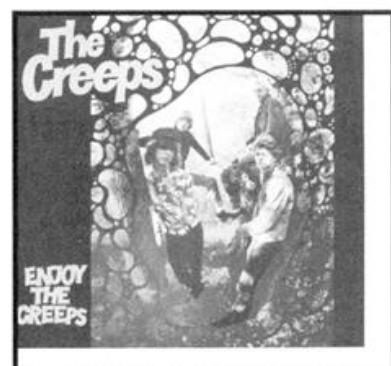
play around Europe soon and say, like most groups, that West Germany is the most receptive country to their sounds.

The LIVINGSTONES were created from the ashes of several bands (including two defectors from the STOMACHMOUTHS) and have a lighter sound.

"Fastest Car Around!" is their first single on Sunlight Records. The LIVINGSTONES are your basic four-person group—two guitars, bass, and drums. "Fastest Car Around!" sounds a lot like the Beach Boys (in fact, the record label looks just like an old Capitol Records label), and the B-side, "You're Not a Better Man Than I," sounds like something off the first LOVE album.

The CREEPS, from Almhult, Sweden, have been around in one form or another since the early '80s. Although the CREEPS' album is selling well, lead singer Robert Jelinek still works at a toy

The Stomachmouths combine a Seeds-style organ and vocals. From left to right: Jens Lindberg, Martin Skeppholm, Stefan Kery, and Anna Nystrom.



The CREEPS, the best Sweden has to offer: Robert Jelinek, unidentified ex-member, Hans Ingemannsson and Anders Johansson. (Patrick Olsson not shown).



"The Swedish Invasion is the first significant music movement of the '80s."

store when the band isn't touring. The CREEPS have had successful gigs in Germany, Austria, Italy, and France, and hope to hit the U.S. after their album is released by a Canadian company. Jelinek plays a Farfisa organ but hopes to eventually buy a Hammond, and is a fan of '60s soul organists like Booker T and Jimmy McGriff, as well as '60s white garage bands. He also admits to liking

The Wylde Mammoths: Per Wannerberg, Peter Maniette, Johan Maniette (wearing glasses) and Patrick Emt.

the THIRTEENTH FLOOR ELEVATORS, who were much more psychedelic than '60s garage bands. He feels that if you can't do a song better than the original, then you shouldn't bother, which is why his band plays nearly all originals.

The CREEPS' debut album, *Enjoy the Creeps*, is the best. Jelinek wrote nine of the twelve cuts, and his voice is so good he even sings two Van Morrison/THEM style ballads ("Darling" and "Come Back Baby") that work. The band even has their own dance craze (The Creep). The only song over three minutes long is "Rattlesnake Shake," an instrumental that could have been on a '60s A.I.P. surf movie track. Jelinek's guitar leads are effective, but simple, and the guy has a great scream. Best of all, the songs are danceable.

The other Swedish bands are standard rock groups like WILMER X (who have

been around for a while and still sing in Swedish—a rarity), and the HIJACKERS, who have just released a first single. Goteburg, a city about 150 miles west of Swedish capital Stockholm, has its own Psycho-garage scene, with bands like LEATHER NUN, CORTEX, and UNION CARBIDE (a pretty amazing Detroit sound group that you should listen for). Other Swedish garage/punk bands are PSYCHOTIC YOUTH, CRIMSON SHADOWS, SHOUTLESS (known for the great "Insane" single), and the WATERMELON MEN from Uppsala, one of the few bands with normal generic short haircuts.

Although the Swedish band scene won't take over the world the way the Beatles and their Anglo-sound did in the '60s, it is the first new and significant music movement of the '80s, which, so far, has offered up nothing else. ●

Ed Hassle's Guide to Safe Smoking (safe sex)

FORD '87

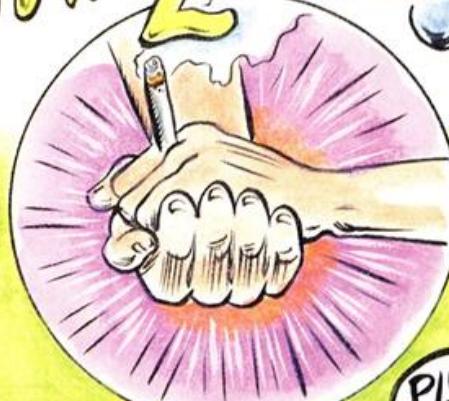
the problem:
GERMS
...on the end of a J'

Solution #1



Solution #2

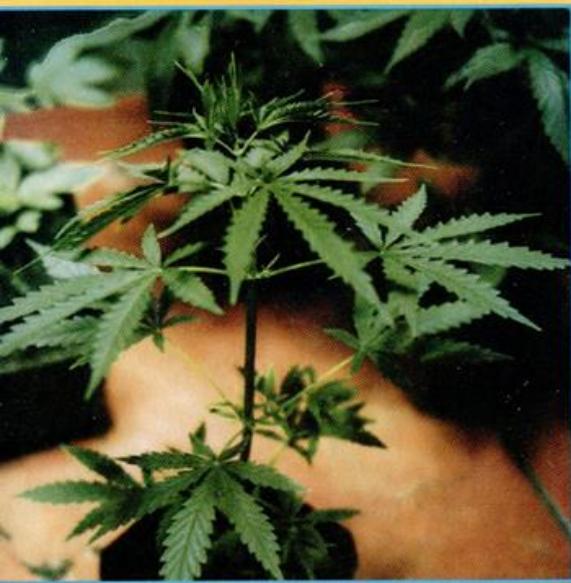
THE OLD HAND CHILLUM, MON!



PLUS YOU GETS DA
RIGHTEOUS HITS

ASKED

BY ED ROSENTHAL



Dear Ed,

Here is a photo of a plant that grew from a seed of unknown origin. It looks like a normal *sativa* plant, but it has three leaves at each internode instead of the usual two. Is this rare? Could this mean the plant is polyploid? Can this characteristic be passed on to the next generation?

—R.,
Kenosha, Wisconsin

Plants with three sets of leaves instead of two are unusual but not rare. Most of the time, after several sets of leaves, the growing tip develops two branches, which grow parallel and equally vigorous. Each branch has only two sets of leaves. It is probably the result of a single gene and is not a sign of polyploidy.

If the plant develops internodes with three sets of leaves instead of two throughout its life cycle, the characteristic can be preserved through breeding. It is easiest to develop seeds with this characteristic if both the male and female plants have three sets of leaves. If not, the plant can be crossed with a normal plant. If all of the resulting plants have three sets of leaves, the characteristic is dominant. If none of them have three sets, the characteristic is recessive. In the unlikely event that the plants exhibit the characteristic in a limited way, the trait is called partially dominant.

Recessive characteristics are the easiest to work with. When the F1 hybrids are crossed, about 25% of the seeds will exhibit the characteristic because they have received the gene for the trait from both parents. If crossed with each other, these plants will produce only three leaf sets. (See chart.)

Dominant characteristics are harder to work with because plants that have only one dominant gene in the two-gene sets will exhibit the characteristic. This means that $\frac{3}{4}$ of the plants resulting from an F1 cross will exhibit sets of three leaves. $\frac{1}{4}$ of the plants will have both genes in the set dominant, $\frac{1}{2}$ will have one dominant gene, and $\frac{1}{4}$ will not have the gene and will have two-leaved sets. Plants with two dominant genes may look a little different than the ones with only one

continued on page 71

POSSIBLE GENETIC MAKEUP OF THREE-LEAF SETS:

CAPITAL LETTERS ARE DOMINANT. SMALL LETTERS ARE RECESSIVE.

	T	n
T	TT	Tn
n	nT	nn

IF THE CHARACTERISTIC
IS DOMINANT

	t	N
t	tt	tN
N	Nt	NN

IF THE CHARACTERISTIC
IS RECESSIVE

	T	N
T	TT	TN
N	NT	NN

IF THE CHARACTERISTIC
IS PARTIALLY DOMINANT

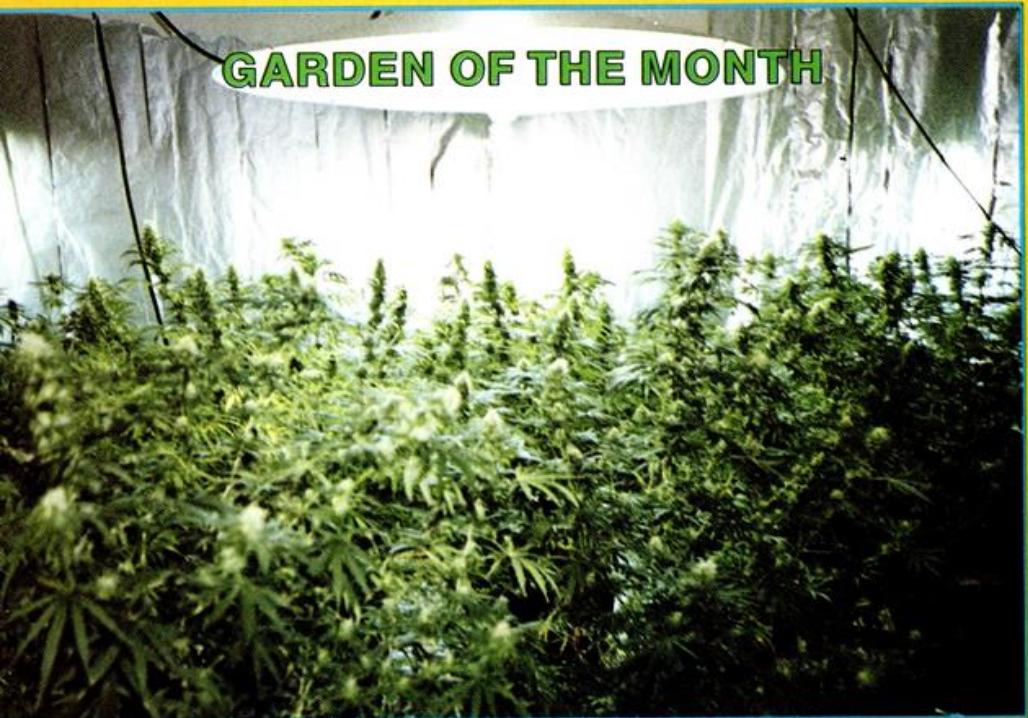
T=Three-leaf sets

N=Two-leaf sets

Shaded areas show characteristic.

Lined areas show partial indication of characteristic.

GARDEN OF THE MONTH



—Anonymous
U.S.A.



BUD OF THE MONTH

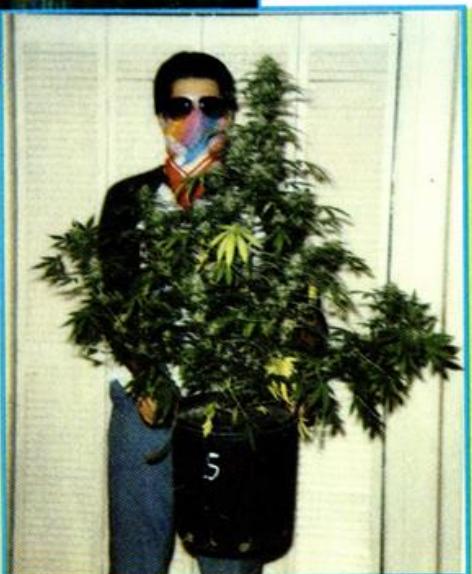
This bud was six ounces. A sativa-indica cross, it turned out to be quality smoke. My first crop ever.

—MRM
Ohio

PLANT OF THE MONTH

Eight-week-old Kush/indica strain. Heavy resin, relaxing high.

—Flyin' high in Florida



MARIJUANA & HEALTH BY ED ROSENTHAL

Marijuana is easily defined in terms of health. It is one of the most benign substances used by humans. This contrasts sharply with the picture painted of it by legalization opponents. For instance, Joyce Nelepk, founder of the Parents for a Drug Free Youth stated, "It is not a moral issue, it is a health issue."

How can there be such divergent views? Simply put, the researchers cited by opponents have been doing *in vitro* experiments, that is under artificial conditions, using situations that are abnormal. On the other hand, there is a body of evidence produced by the 20-year "open lab," during which millions of people have been using marijuana.

Government-sponsored research on marijuana is based on the "pathology theory," trying to find diseases caused by marijuana. This line of experimentation is usually considered unscientific because it is based on predrawn conclusion. The researcher has an interest in producing specific results. Thus, a quack such as the late Hardin Jones was able to qualify for government grants.

The government itself admits that marijuana is relatively harmless. In public information pamphlets it states, "Marijuana does not directly cause mental problems, but like many other drugs, it appears to bring to the surface emotional problems and can even trigger more severe disorders, particularly schizophrenia." "...There is little evidence that the drug is physically addicting." "There is nothing in marijuana itself that causes people to use other drugs." "No definitive neurological study of humans has turned up evidence of marijuana-related permanent brain damage." "...There is no direct evidence so far that marijuana can cause cancer in humans."

Government paid researchers use spurious methods to conduct experiments. On all objective tests, including the use of marijuana and THC for medical purposes, the two substances—marijuana, the crude plant material, and THC, either naturally refined or synthetic—perform differently. Nevertheless, researchers often use THC and extrapolate the experiments to marijuana. However, the effects of marijuana—not the isolated, refined, concentrated chemical THC—are never actually tested.



PHOTOGRAPH BY
Ed Rosenthal

THE IMPORTANCE OF RUDERALIS

BY ED ROSENTHAL

For as long as marijuana has been cultivated domestically, we have thought of it as a short-day flowering plant, or more accurately, as a fall flowering plant. When the feral plant is adapted to its environment, it is triggered by night-length into flowering and ripening at the right time of the season. For temperate area plants, it should be late enough to inhibit seed germination and foraging by fall predators, but early enough to assure mature seeds for the next growing season.

Some varieties, such as the Durbans and Moroccans, flower very early in the season, and can start early budding under as little as eight hours of darkness. Even so, the flowering pattern is regulated primarily by light cycle.

Ruderalis is found in the steppes of central and eastern Europe. Incidentally, this is part of the same area that Jean Auel's heroine, Ayla, traverses in the Earth people books, *Clan of the Cave Bear*, *Valley of the Horses*, etc. The summers there are chancy. A summer can be completely overcast, rainy, sunny, hot, cold, short or lasting. In order to survive, a population must make sure that seeds are produced as quickly as possible.

Ruderalis has assured seed production by producing flowers within a week after germination. As the plant grows, the top buds continue to produce new flowers in a typical conical formation. When the flowers are fertilized, seeds drop continually throughout the season. The plant continues to flower and produce seed until killed by cold weather.

Unfertilized, *ruderalis* follows a similar path, flowering profusely until killed by cold weather. There is no definite ripening (definition: "ripening"—final stages of growth, when the pistils recede into the false calyx, which fills out; at the same time, the numerous capitate glandular trichomes or resin glands balloon out as they fill with the cannabinoid compounds formed in the cells underneath them) of the bud. It always looks immature. On June 22, at the 53rd latitude, there is a very short dark period. However, I saw *ruderalis* x *indica* hybrids growing outdoors which had nice healthy buds eight to ten inches long and up to four-inch diameter at base.

Ruderalis has some other interesting survival characteristics. The seeds have very hard shells and do not germinate if planted without being cracked. Simply winterizing the seeds with a few freezes and thaws in the freezer will not crack them. It would seem that the plants would naturally produce an abundance of seed, even in an unfavorable season. However, only some of the seeds will crack and germinate each year. The remaining seeds will be left to germinate in the years following, maintaining the population's presence even if an entire season's seed production were wiped out.

While Shultes reported *ruderalis* to be a very short, almost fragile plant with little branching, grown under favorable conditions, some variants at least, look more like *sativas*, with a dominant main stem. They are vigorous, and grow three to six feet tall in a good season. Apparently, Shultes' plants were stunted by environmental conditions. Even so, they were able to produce seed.

continued over

BY JORGE CERVANTES

"Hello, the Seed Bank, how can I help you mate?" answers a masculine Australian voice with melodic tone and a touch of formality.

"A yeah," responds a voice 10,000 miles away somewhere in North America.

"I wanted to find out a little more about that *ruderalis* plant. Does it really flower after four to five weeks, regardless of the hours of light it receives? I mean will it flower in June or July if I plant it April first?" the voice asked in disbelief.

"That's right, true *ruderalis* flowers as soon as it is six inches to a foot tall. But the true *ruderalis* plant has just a speck of THC and leafy tops. What I have done is cross-bred the *ruderalis* plant with *sativas* and *indicas* to achieve a plant that will bloom when it is six inches tall and mature into a plant with huge, potent buds. Simple genetics and breeding, that's what I am putting into practice," says Nevil, with proud precision.

Cannabis sativa plants are tall, have long internode length with slender, serrated leaves, and are late-blooming with a soaring energetic high. *Cannabis indica* is short, squat and bushy with broad leaves, and a heavy high. An increasing number of growers have also heard about *cannabis ruderalis*: The no-high pot that grows wild in Russia. This is a very special plant, but it has been overlooked by all but one breeder: NEVIL, King of the Cannabis Castle (HIGH TIMES, March '87).

The times, money and the most open society in the world have set the stage for the most outrageous discovery since sinsemilla. Varieties such as Early Pearl, Skunk No. 1 and Big Bud that have tantalized the cannabis connoisseur's palate for the last decade, are now being crossed with the unknown, forgotten and no-high *ruderalis*. Why? The photoperiod. Both *sativa* and *indica* are short-day plants that ripen when the nights grow long and days grow short: as when autumn is approaching and flowering is prompted. *Ruderalis* is not photoperiodic responsive. *Ruderalis* will flower after it is six to twelve inches tall, even under 24 hours of light.

A quote from *Marijuana Botany*, by Clarke (page 115), provides an excellent description of *Cannabis ruderalis* (also referred to as *Cannabis spontanea*) and projects the value of *ruderalis* for breeding early flowering varieties.

Russian—(35 degrees to 60 degrees north latitude) Short stature, 3-18 inches and brief life cycle (8 to 10 weeks) wide, reduced leaves and specialized seeds characterize weed Cannabis of Russia. Janischewsky (1924) discovered weedy Cannabis and named it *Cannabis ruderalis*.

Ruderalis could prove valuable in breeding rapidly maturing strains for commercial use in temperate latitudes. It flowers when approximately 7 weeks old without apparent dependence on daylength. Russian Cannabis *ruderalis* is nearly always high in CBD and low in THC.

continued over

ED ON RUDERALIS

continued from previous page

The *ruderalis* start-flowering characteristic seems to be dominant. The Seed Bank reports that it has used *ruderalis* in back crosses with *indicas*. (In other words they started by crossing a *ruderalis* with an *indica*, and then kept crossing a hybrid obtained with favorable characteristics with a pure *indica*). In this way, they were able to breed the favorable start-flowering characteristic into a relatively pure *indica*.

The ripening characteristic is regulated by different genes than the start flowering characteristic. An age determinate flowering trait such as found in *ruderalis* can be bred into another variety. *Ruderalis* × *indica* or *sativa* hybrids vary in their budding characteristics as well as in their ripening response to lengthening dark periods, based on their non-*ruderalis* parent.

An early ripening plant such as a Durban, Moroccan, northern Chinese, American or north-European hemp, or domesticated early-flowering marijuana could be crossed to a *ruderalis*. The hybrid would be early-flowering and possi-

bly early-ripening but probably not very potent. After a few backcrosses, a consistent early-flowering and early-ripening strain can be developed. Once the strain with the new trait is developed, it can be crossed with the various potent strains. After a few backcrosses, the weed should be as tasty as ever.

The folks at Seed Bank and at SSSC feel that the *ruderalis* high is not too good. It ranges from a CBD buzz to a crude, primitive unrefined smoke and high. However, some correspondents have mentioned that they were familiar with potent, pleasant smoking *ruderalis* varieties. In the fall of 1986 in the European part of the USSR, there was a crackdown of wild marijuana harvesters. Presumably these people were harvesting *ruderalis* buds.

Once a variety has this age-determinant quality, it can be planted any time of the year and be expected to flower. For instance, in the United States, plants growing outdoors could be expected to yield a bud 60-90 days after planting. The bud will not necessarily be "ripe," but it certainly gives the grower flexibility in his/her planting schedule.

If clones or seeds can be planted outdoors in April or May, the buds could be

harvested in June or July. It is very likely that the plants would start to form new buds. Plants could be started continuously through the growing cycle.

Equatorial *sativas* are difficult for both indoor and outdoor gardeners to bud because they flower late in the season and require intense light. However, *ruderalis* × equatorial-*sativa* crosses should initiate flowering early in the season and probably require less intense light to form a big bud.

Indoors, *ruderalis* plants indicate at 24 hours of light, but heavy budding does not start until the dark cycle gets up to four to six hours. The implications of this characteristic in terms of indoor cultivation have not really been explored. It seems that it would facilitate plantlet-type, single buds, since the plants are virtually always ready to flower. The Moroccan growing pattern is a single stemmed, singled-budded plant. A plant with *ruderalis* and Moroccan flowering and growing characteristics, and the potency and flavor of one of the usual crew of favored varieties, would be ideal for these gardens.

Ruderalis grows as a weed over vast areas of central and eastern Europe. Thousands of strains with wide genetic variance have developed to fit different

JORGE ON RUDERALIS

continued from previous page



Male Northern Lights Indica with RFC. It had grown under continuous light until flowered. Five weeks old.

toric day was June 29, the same day (different years) New York decriminalized marijuana. After examining thousands of plants, Nevil culminated a two-year quest with the discovery of the ultimate *ruderalis* variety. The plant was a super-strong, oversized specimen, about 3½ feet tall, with coarse *sativa*like foliage and few calyxes. Most importantly, it was nonphotoperiodic-reactive, blooming in the middle of summer! This historic plant is pictured on the cover of The Seed Banks Catalogue.

True *ruderalis* seed is small with a motley, dark-brown color. One notable quality about *ruderalis* seed is that a small, protruding foot is found at the base. When the *ruderalis* is crossed with another *sativa* and/or *indica* variety, the foot slowly disappears as the percentage of *ruderalis* decreases.

Ruderalis has a set of genes (chromosomes) that promote early-flowering regardless of the photoperiod. The early flowering genes are dominant. The trick is to cross-breed the *ruderalis* so that dominant, early-flowering genes will cause the *ruderalis*/*indica*/*sativa* cross to flower when six to twelve inches tall regardless of photoperiod.

In theory, this breeding scenario works; in reality, it is being set into motion. Once these variety selections are made, the indoor environment provides the technology to expedite the breeding processes. With the technology provided by HID lamps, a complete life cycle—or one generation—can be completed in three short

months. Every calendar year (12 months), four generations (five generations with luck) of plants are able to grow to maturity and produce seed. This technology, coupled with a desire to smoke the very best, will undoubtedly bring forth the ultimate plant.

Implications of such a *ruderalis*/*indica*/*sativa* cross are mind-shattering. Imagine a plant that can be sown early or late and be ripe before all the other varieties. A *ruderalis*/*indica*/*sativa* cross-planted on April first will show signs of maturity by August first. However, the buds do not set on the final weight until September. The plants are still ripe enough on the first of August. In Northern or harsh climates with short growing seasons, *ruderalis* cross varieties can be grown indoors until they are six to twelve inches tall and then transplanted outdoors to flower during the short summer before the killing frost.

To breed early-flowering *ruderalis* with the high THC *sativa* and *indica* varieties, Nevil simply followed Mendel's basic laws of breeding. He bred the *ruderalis* varieties and selected the earliest flowering of the lot. The young males flower when they are six to twelve inches tall. He crossed this early-flowering male *ruderalis* plant with numerous *indica* and/or *sativa* varieties. Each time he would select the male *ruderalis*/*indica*/*sativa* cross plants that bloomed earliest; these males then crossed back with *indica*/*sativa* females. Each time this evolution takes place, a larger percentage of the

environmental conditions. Right now, the seeds people are experimenting with are the only varieties that they are able to obtain. The seed has just been cracked.

RUDERALIS:

NEVIL'S BREEDING TECHNIQUE IN THE KING'S OWN WORDS.

My next task was to incorporate *ruderalis*' early flowering characteristic into higher quality plants. I learned from my F₁ hybrids that about 10% of the offspring showed the *ruderalis* characteristic. I backcrossed one of the hybrid males to a non-*ruderalis* female, and 50% of the offspring had the *ruderalis* characteristic. This held true for each generation thereafter (see chart).

"This indicates that the characteristic is a simple dominant trait. Any hybrid exhibiting the trait has it on only one chromosome, and possibly, only one allele is responsible.

original *ruderalis* is bred out and more *indica/sativa* is bred in. The only desirable characteristic that is retained from the *ruderalis* is early flowering. In order to get a true-breeding *ruderalis/indica/sativa* cross, many generations must evolve and literally thousands of plants must be grown in the gene pool to find the one with the right genes: early-flowering, desired THC content and growth characteristics.

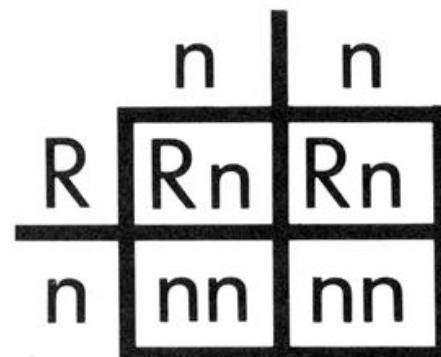
When the early-flowering *ruderalis/indica/sativa* male is crossed with a true-breeding *indica* or *sativa* to form an F₁ hybrid, about half of the offspring will flower early and the rest will flower late. These seeds are the ultimate. You harvest 50 percent early crop and 50 percent late crop, and get hybrid vigor to boot!

The first time Nevil crossed the early-flowering *ruderalis* male, he was super pleased with the results. For every ten of the first *ruderalis/indica/sativa* crosses, all ten of them retained the early-flowering characteristic. This could mean only one thing: early-flowering genes in the *ruderalis* were dominant. Now it was just a matter of continuing to breed the rest of the undesirable characteristics of *ruderalis* out and retain only the early-flowering characteristic.

Growing indoors with high intensity discharge lamps helped immensely. The main characteristic he was looking for was early flowering in male plants, all he had to do was grow early-flowering male plants, select the fastest bloomer and cross it with the other *ruderalis/indica/sativa* females. The indoor grow rooms

"I decided to introduce this characteristic to my best lines. The mother plant was backcrossed with its earliest flowering son for six generations. Only about 2% of the genetic material was introduced by the *ruderalis* cross. I used a Mexican-Thai line on the *sativa* side (the last generation is leaning heavily towards the Thai) a Skunk line, which is 97% Skunk, Northern Lights and Hash Plant and Big Bud and G-13.

n = Normal Flowering
R = Ruderalis Flowering



facilitate separation of males and females. Since he was able to control all of the factors in the grow rooms, he could grow four or five generations a year! In just three short years, Nevil has managed to cram the equivalent of fifteen generations of breeding. Without the help of HID's, only three generations would have been possible.

A major setback facing growers is the

"In terms of breeding these plants for commercial use, when I feel the lines are ready, I will have to breed plants with the *ruderalis* factor in both chromosomes so that all of the resulting seed has the *ruderalis* factor. To do this I will cross the plant with its mother or sister. 75% of the plants will indicate *ruderalis* factor, but only about 25% of them will have it on both chromosomes. To find out, I have to cross the resulting plants with a non-*ruderalis* plant. The ones that generate 100% *ruderalis* are the two-chromosome plants. Having found a male and female, I then have a pure line.

"*Ruderalis*' flowering characteristics have broadened the horizons of cannabis breeding and growing. Pure *ruderalis* shows sex and begins to flower four to six weeks after germination, when the plants are a foot tall. It continues to flower as it grows under increasing daylight.

"The plant's primary function is to flower, and there is very little that can be done as far as light regimen that can stop it.

"Some plants become stunted, others produce long, hairy buds, and some finish off right away, except under a long photoperiod. Under decreasing day

continued on page 74

tendency to stick with the same clones. Consequently, little breeding takes place in indoor grow rooms.

Outdoors, in the U.S. growers are seldom able to harvest all their crop, and if they do harvest it, breeding may be very low on their priority list. They have to move the patches almost yearly and maintenance of breeding programs take on a real nomadic approach. ●

SOME IMPORTANT FACTS:

Ruderalis has had a difficult time retaining the same botanical classification. It seems that some botanists think *ruderalis* is a variety of *cannabis sativa* while others believe it to warrant its own classification of species. Regardless of nomenclature, we know that a *ruderalis* plant will bloom when it is six to twelve inches tall regardless of the photoperiod.

The *ruderalis* crosses have a compact size and rapid growth which make them seemingly perfect to cultivate indoors. The grower can employ 18-24-hour days and a minimum of care and grow super plants. The *ruderalis* crosses will bloom before they get too tall; the plant makes the decision as to when it flowers, eliminating one more decision for the grower. Cuttings can be taken from the *ruderalis* crosses before they begin to flower. However, this practice is difficult to maintain because the *ruderalis* crosses will be blooming within four to six weeks. Seeds are essential to achieve consecutive crops.

To date, the *ruderalis* crosses offer the indoor grower little more than the *indicas* or the *indica/sativa* crosses. The *ruderalis* crosses are very photoperiodic-sensitive. If the photoperiod is cut to 12 hours, the *ruderalis* plant will complete flowering immediately and produce a miserable harvest. Currently The Seed Bank is experimenting with various photoperiod combinations for indoor *ruderalis/indica/sativa* crosses

—J.C.

POSSIBLE MEDICAL USES OF CANNABIS

Various societies have used cannabis to treat a variety of illnesses over the centuries, and Western medicine has recently begun to investigate cannabis as well. According to the **RELMAN REPORT**, there are two reasons for medical interest: The first is that cannabis exerts its effects "through mechanisms that differ from those of other available drugs," and secondly "since cannabis often works as an additive with other drugs, it is possible that cannabis could be combined with other drugs to achieve a therapeutic goal, but with each drug being used at a lower dose than would be required if either were used alone. As a result, fewer side effects would be expected to occur."

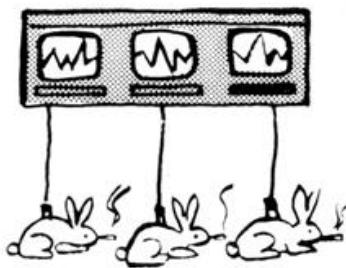
Some of the experimentation has been promising, but some has been a dismal failure. (Note Rick Seymour's comment about drug addiction in the section on syndromes.) Some of the areas of the therapeutic potential of cannabis include:

Glaucoma: Smoking marijuana reduces intraocular pressure in many patients, but the effect is temporary (only as long as three or four hours), and many patients don't like the side effect of intoxication. Some research is continuing with the thought of isolating Delta 8-THC and making a topical ointment that would have the therapeutic effect without the intoxication.

Chemotherapy: Vomiting and nausea which accompanies chemotherapy treatment in cancer patients is so awful that some patients discontinue treatment. Cannabis has been found to be an anti-emetic (anti-vomiting) agent, and Delta 9-THC has been made available through the Food and Drug Administration for this purpose in most states. Again, the intoxicating effects are sometimes disorienting, and the treatment is seen as worse than the disease. Some research is going on in an attempt to isolate certain cannabinoids which would produce the anti-emetic action without side effects.

In some cancer patients cannabis has been shown to be an appetite stimulant, but here too, side effects have kept many patients from continuing its use.

Anticonvulsant: Human and animal studies have shown that cannabis can be useful in blocking certain types of seizures—notably certain types of epileptic seizures—and research is



being done in this area.

Muscle relaxant: Petro and Ellenberger have demonstrated that cannabis is effective in relieving muscle spasm or spasticity, though there seems to be no evidence of continuing research in this promising field.

Asthma relief: While marijuana works as a bronchodilator and was thought at one time to be of possible use in this area, it is no longer considered viable because of the tolerance that develops to the smoke. Some work is being done on isolating compounds which might be effective and not require smoking.

Anti-anxiety: Cannabis appears effective as an anti-anxiety drug in some people, but it produces anxiety in others. No evidence of continuing research here, either.

Analgesic action: While some studies have shown cannabis to be effective in blocking certain types of pain, none show it more effective than what is already on the market. No further research is currently being done in this area.



Alcoholism: While at one time it was thought that cannabis might be effective in treating alcoholism, it has now been shown that cannabis and alcohol have an additive effect on each other and produce undesirable effects in this area.

Opiate Withdrawal: Here too, cannabis was at one time thought to be an effective tool. Now, however, it has been shown to not aid the withdrawing addict and to possibly reduce mental toughness, actually leading to continuing addiction and relapse.

Cannabis Research

1. There is a problem of relating animal research to human experience. In many areas the crossover is not accepted as accurate.

2. Problems are encountered in regulating the dose. In research it is easier to use isolated Delta 9-THC, though this is rarely used by itself in the individual, and the isolated component doesn't necessarily act the same way when it is found as part of the whole plant.

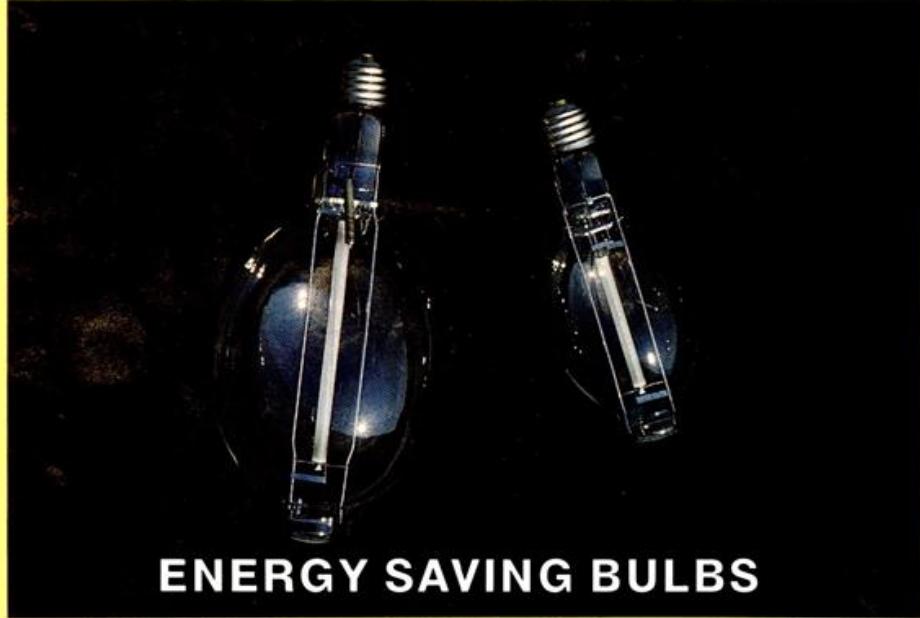
3. Since researchers are not permitted to take nonsmokers and make them smokers—grass being illegal—they must study subjects who already smoke. Since smokers are often multidrug users, assessing what part of a health issue is directly associated with grass is often a difficult and, certainly, a manipulable factor.



4. In studies of cross-cultural smokers, ganja smokers in Jamaica for example, critics of these studies point out that the accurate histories of the subjects contain variables that researchers cannot control. Proponents of these cross-cultural studies point out that these populations have a generational history of smoking. Critics point out that in cultures where cannabis is acceptable, it is acceptable only among laborers, not intelligentsia, and so results are not applicable to our society.

5. Not every researcher is scrupulous, and the lure of a research buck or continuing research bucks for information the funding organizations want to hear cannot be overlooked.

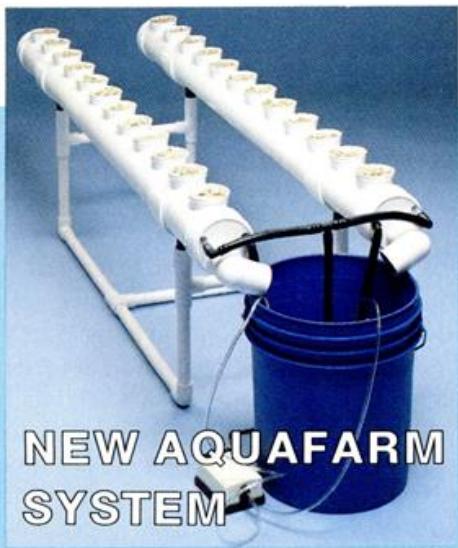
continued on page 91



ENERGY SAVING BULBS

ENERGY SAVERS announces their new high-pressure sodium bulbs specifically designed for metal halide or mercury vapor lighting systems. When your plants are ready to bud, simply change your metal halide bulb to the special high-pressure sodium bulb.

These HPS conversion bulbs are real energy savers and put out 140,000 lumens (100-watt) and 50,000 (400-watt), and they last a full 24,000 hours. At a cost of \$139.00 for the 1000-watt, and \$69.00 for the 400-watt, you can make the switch to high-pressure sodium without making a large investment. Order your conversion bulbs today. COD orders welcome. **ENERGY SAVERS UNLIMITED, INC.**, 22138 S. Vermont, Unit C, Torrance, CA 90502. Outside California, phone (800) 421-2994; inside California, phone (800) 538-3400.

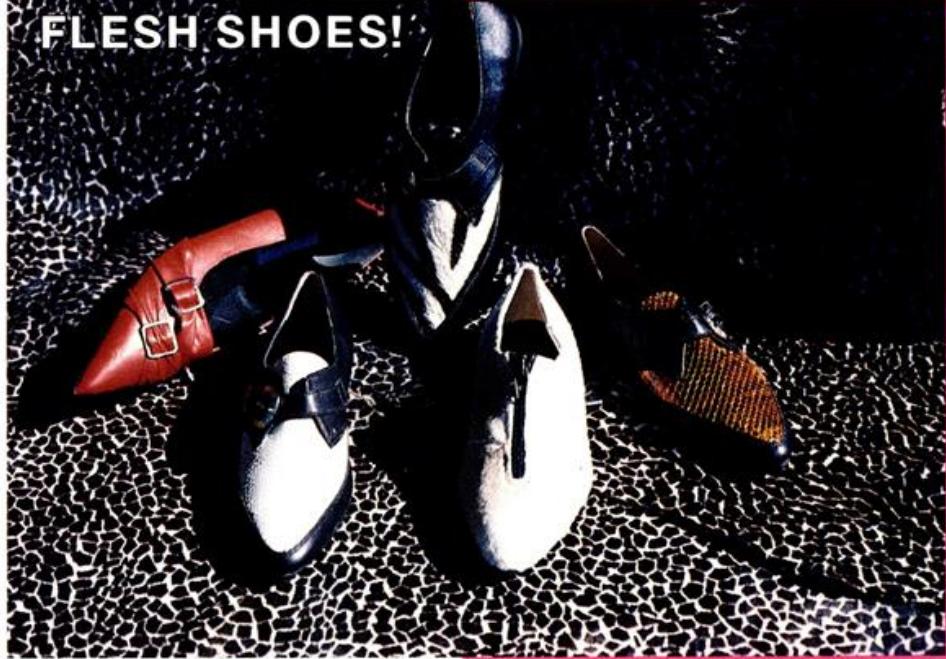


NEW AQUAFARM SYSTEM

DIAMOND LIGHTS and GENERAL HYDROPOONICS are proud to offer aeroponic technology to the home grower. The AEROFLO system is the most advanced hydroponic growing system available in the world today. This system is capable of growing 24 clones to maturity in six weeks using the "Sea of Green" method. The AEROFLO system combines aeroponic and NFT technology to make it a unique hybrid system. For more information and a free catalog, phone DIAMOND LIGHTS at (800) 331-3994; in California, (800) 459-3994.

These shoes are so comfortable, they feel like you're wearing nothing at all! They're available in new wave styles for both men and women—the English look at affordable prices. So put your feet in the hands of **FLESH SHOES**, 9629 Las Tunas, Temple City, CA 91780. Write for free catalog.

FLESH SHOES!



continued over

PRODUCTS

continued from previous page

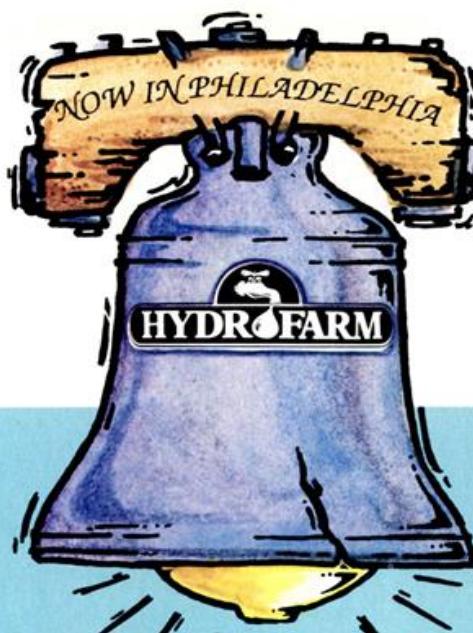


CLOSET FARMER TIME HAS COME!

URBAN PLANTATION,™ has more variety than ever before, with four exciting new **CLOSET FARMERS.™** **CLOSET FARMER IV DELUXE** stands 6' x 3' x 2', comes with three **AQUAFARMS,™** and a 400-watt (32,000 lumens) metal halide **OR** 400-watt (50,000) lumens HPS.

HYDRO WILLIE is proud of another new product, the **CLONING GENERATOR.™** You can grow 15 clones two to three feet in six to eight weeks. This dynamic aero-flow system fits into any of the Closet Farmer systems, and the Cloning Generator comes as an option to any deluxe Closet Farmer—or you can buy it separately.

Call **HYDRO WILLIE** for his new free 26-page catalog: (800) 322-7555, or in California call (415) 258-9226. The **CLONING GENERATOR** is trademarked and especially made for the **CLOSET FARMER** by General Hydroponics.

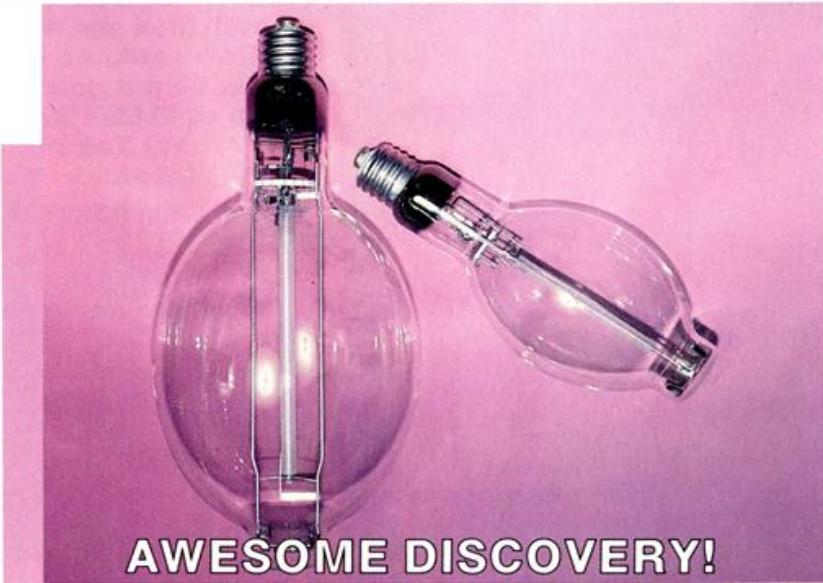


EAST OR WEST GROW WITH THE BEST!

Applied Hydroponics is proud to announce the opening of a full-service factory and retail store in suburban Philadelphia. The San Francisco-based manufacturer of **HYDROFARM™** products is the oldest and largest maker of top quality, indoor gardening equipment. **HYDROFARM™** products are the most widely available and the best known brand of indoor growing products on the market.

Now, with the opening of an additional **APPLIED HYDROPOONICS** facility in suburban Philadelphia, eastern customers can look forward to direct, toll-free ordering and the same immediate delivery enjoyed by customers in the west. And, the convenient location near the crossroads of Interstate 95 and the Pennsylvania Turnpike makes it just a short ride for most eastern growers.

To get information and a free catalog of **HYDROFARM™** indoor gardening products, call **APPLIED HYDROPOONICS** toll free: in the eastern U.S. call (800) 227-4567; in the western U.S. call (800) 634-9999, and check out their ads on pages 8, 9 and 13.



Thinking of buying a HPS system? Well now you can have the convenience of a HPS bulb that runs off your metal halide ballast, thanks to the latest technology in lighting—**conversion bulbs!**

The bulb uses less electricity and has a life expectancy of 24,000 hours, so you can realize enough savings in energy within one year, to virtually pay for the bulb itself!

A 400-watt conversion bulb (50,000 lumens, using only 360 watts) is \$80.00; a 1000-watt conversion bulb (140,000 lumens, using only 940 watts) is \$155.00. Imagine!—one ballast, two bulbs! Two complete light systems with the convenience of one, and a savings to you. Order now! Call **MAH**: outside New York, (800) 227-9351; inside New York, (212) 231-9472.

A S K E D

continued from page 62

dominant gene. On the other hand they may not. If this is the case, there are two easy ways to find out which plants have double dominants. One is to breed the plants (the F2s) and see which pairs result in all three-leaved sets (the F3s). The F2s which generated the all three-leaved plants had double sets. The F2s could also be bred to a normal plant. Once again, the F2s which result in all three-leaved plants have both genes of the set dominant. If the F2 or their clones are kept alive, then the double dominant F2s can be used to breed all three-leaved F1 sets. Of course, all the F3s resulting from those F2s have only three-leaf sets, too. (See chart 2.)

To breed plants with partially dominant genes, the F1s are crossed. Plants which exhibit the three-leaved characteristic totally have a double set of three-leaf genes. (See chart 3.)

Dear Ed,

I had just worked an eight-hour shift and I was walking home when a stranger offered me a lift. Being tired, I accepted. He stopped to drop me off at the local pool hall and asked me if I wanted to smoke a joint. I said of course.

The next thing I knew a policeman had crawled on his hands and knees, jumped up and grabbed me by the arm and arrested me for attempted possession! I couldn't believe it! I had one dollar on me, total cash, but the policeman and the stranger that gave me the ride insisted in court that I was in the act of purchasing an ounce of weed! With one dollar! Even a moron knows you can't buy an ounce of weed for a dollar! As I was complaining to the judge that I was being framed, he ordered me to be restrained!

A lady rushed up to me with some documents to sign to voluntarily register for drug rehabilitation and since I couldn't afford a lawyer or the fine, I was glad to do so! I was an outpatient for four months before they would drop charges that were false in the beginning.

Earlier, the arresting officer had tried to pay my own brother to bust me. He'd been after me for about five years. I knew I'd outsmarted him till the frame. Later I saw him in a liquor store, and he told me he'd been fired because of the incident. I was thrilled that the chase was off. Still, I had to serve four months in rehab! Was that right legally?

Let anyone that passes through Monroe or West Monroe, Louisiana know that there are narcotics and informers on every street corner and highway there. They have more disguises than you could ever believe!

—Innocent Victim,
Monroe, Louisiana

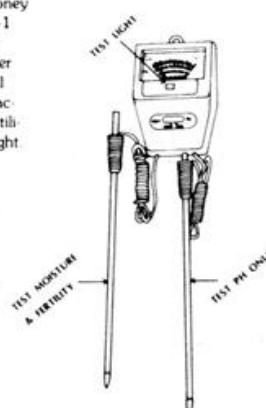
continued on page 73

SAVE YOUR PLANTS

No More Messy Soil Test Kits!

Save time and money with the new 4-in-1 Plant Meter. This amazing new meter accurately tests all these important factors: moisture, fertility, pH level and light. Test a plant in seconds. Works without batteries or electricity: nothing to wear out. Eliminate the guesswork in your garden.

Comes with a handy plant guide. A must for all serious growers.



ONLY \$14.95

(plus \$2 p&h.)

Save - get 2 for \$30. post paid.

Money back guarantee. Dealer inquiries welcome.

M M Enterprises
P.O. Box 894
Malone, Wa 98559

Name _____

Address _____

Payment enclosed

Charge my: Mastercard VISA

Date expires: _____

A

Signature _____

EFFECTIVE AIR PURIFICATION

Activated Charcoal Air Purifier

Provides **CLEAN, ODOR-FREE AIR** for Optimum plant growth. Unlike Ion Generators. Remove odors and pollutants from air rather than depositing them on walls and plants.

Two Sizes Available:

140 CFM \$119 50 CFM \$89

30X HAND HELD MICROSCOPE

comes with built-in filtered light and leatherette case \$23⁹⁵

WE SPECIALIZE IN
FANS, DEHUMIDIFIERS,
THERMOSTATS, HUMIDISTATS,
TIMERS, PUMPS, ETC.

For complete product catalog and price list, send \$2⁰⁰ (refundable with first order) to:

S & S SALES (714) 548-5908
1822½ Newport Blvd., Suite 126
Costa Mesa, CA 92627

California residents include 6% sales tax.

LIVING SYSTEM™

By

LIGHT MANUFACTURING COMPANY

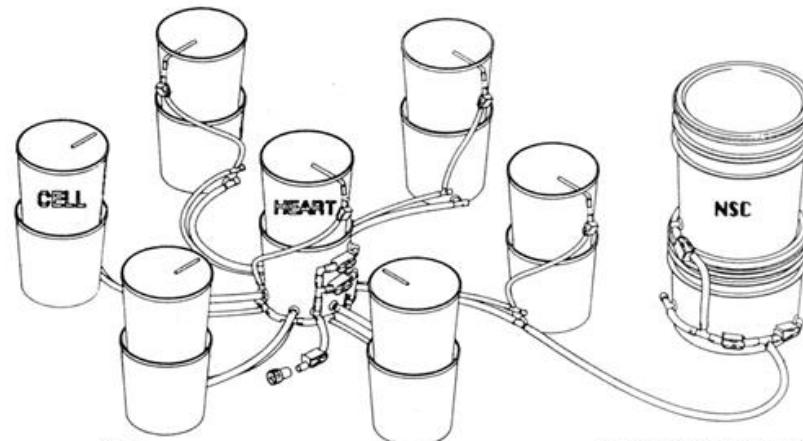
1634 S.E. Brooklyn
Portland, OR 97202

30 DAY MONEY BACK GUARANTEE

CALL NOW

(503)231-1582

FOR FREE CATALOG



CELL
INDIVIDUAL AND INTERCHANGEABLE GROWTH MODULES. SHUT-OFF CLAMP EASY DISCONNECT.

ADD OVER 60 CELLS, ADJUSTABLE NUTRIENT FLOW AUTOMATIC FLUSH AND DRAIN TOTAL NUTRIENT RECIRCULATION.

NUTRIENT SUPPLY CENTER
5 GALLON MIXING RESERVOIR
NUTRIENT LEVEL REGULATION
RESERVOIR EXPANSION PORT.

"THIS HYDROPONIC UNIT IS ONE OF THE MOST VERSITILE AND PRODUCTIVE ON THE MARKET" -- JORGE CERVANTES

Modern Agriculture - Horticulture

H.P.S. CONVERSION BULB

For All Your Growing Needs



Est. 1983

AVAILABLE HERE!

151 ALKIER ST. BRENTWOOD
N.Y. 11717 (516)231-9472

VISIT OUR SHOWROOM
MON-FRI 12-8
SAT 10-8



© COPYRIGHT 1987 MAH

Orders outside NY 1-800-227-9351

Halides, H.P.S., Hydroponics,
Nutrients, Growing Mediums,
CO₂ Units, Exhaust Blowers,
Pots, Saucers, Much More . . .

Free Gift With Each Light Order

C.O.D. VISA MasterCard



WORM'S WAY

AUTHORIZED RETAIL CENTER

FOR APPLIED HYDROPONICS PRODUCTS

STORE SALES ONLY

- Hydrolite® 1000W & 400W Systems
- HPS 1000W & 400W Systems
- Sun Circle®
- Solar Shuttle®
- Hydrofarm® Systems
- CO₂ Injection Kits

RETAIL AND MAIL ORDER

- Water Chain® Drip Irrigation
- Rockwool & necessities
- Timers — Fans — Mylar
- Worm Castings — Bat Guano
- Super Tea — Budswell
- Eco-Grow — Dyna-Gro

BOOKS & MUCH, MUCH MORE!



CALL, WRITE OR VISIT FOR A FREE CATALOG



4620 South State Road 446 • Bloomington, IN 47401 • (812) 837-9901

THE MARIJUANA 87
SEED CATALOG 88

ALSO AVAILABLE
S.S.S.C.'S
DUTCH HIGH TECH GROWERS GUIDE

- COLOR PICTURES
- EVERYTHING ABOUT THE GROWING MEDIUM OF THE FUTURE: ROCKWOOL
- NEW TIPS ON OUTDOORGROWING
- EVERYTHING ABOUT MAKING CUTTINGS
- INSTRUCTIONS TO ENABLE YOU TO OBTAIN AN INDOOR HARVEST OF 3-4 POUNDS OF DRIED BUDS PER 10 SQ. FT. PER YEAR

PRICE: \$5 + \$2 FOR SHIPPING
AND HANDLING. CASH ONLY.

YES! PLEASE SEND ME A FREE COPY OF THE THE MARIJUANA SEED CATALOG '87 - '88
 ENCLOSED IS MY \$7 CASH FOR A COPY OF S.S.S.C.'S DUTCH HIGH TECH GROWERS GUIDE

NAME

ADDRESS

TOWN

STATE/ZIP

SEND VIA AIRMAIL TO:
S.S.S.C. - POSTBUS 1942
1000 BX AMSTERDAM - HOLLAND
DISCRETION ASSURED.

GIBSON INTERVIEW

continued from page 39

can't stand—that's, as I see it, the essence of post-modernism. Mongrelization. Hyphenization of culture. And my experience with people that have that particular sort of taste has been that they are bizarrely catholic in terms of what they like. You know, one night they'll take you to see mud wrestling, and the next night, Billy Graham. It's all grist for the mill.

Is that the way your mind works—absorbing things like flypaper?

Well, it would if I weren't so lazy. But yeah, I think that's a fairly common state for writers. I think the most difficult thing is attaining a sufficiently open mind about, you know, what you let emerge. It's largely a matter of context how effective it's going to be. It's a very intuitive process, this unwinding of memory. That's what the computer metaphor in my books is about, really, human memory—the how and the why of remembering. I think we are memory in some ways; without it we wouldn't be ourselves. Yet it is so easily subject to revision.

And therefore reality is subject to revision as well?

Yeah, I think so. That's been the main undercurrent of psychiatry for the past 50 years or so, this revision of memory and getting back to first causes. I always thought straight Freudian analysis was like a time travel story, you know—if you could work your way back in your memory, and—

—Fuck your mother—

Yeah, fuck your mother, then you're free, and it then proceeds back up the time stream. At the other end, we are approaching the point of downloading human consciousness into some sort of artificial matrix.

Downloading what? Information, or actual consciousness?

That's where I get lost . . . seems to me that information—memory—and consciousness are perhaps the same thing. But it's kind of like cloning in that we're talking about making multiple copies of human consciousness, and downloading them into anything—other bodies, robots, or Alfa Romeos, even. It's things like that that make my head hurt when I sit down and think about them. ●

F R E E

THE MARIJUANA SEED

CATALOG '87-'88

40 COLOR PICTURES

TOP QUALITY MARIJUANA SEEDS
INDICA'S, SATIVA'S AND HYBRIDS
U.S.-TOPS TRAINS AND EXOTICS

CAREFULLY BRED FOR INDOOR AND
OUTDOOR GROWING

MARIJUANA SEED BREEDING AND
PRODUCING IS OUR PROFESSION

SUPER SATIVA SEED CLUB

EXOTIC SEEDS FROM
AMSTERDAM

A N E W A G E S E R V I C E

72 ▶ NOVEMBER 1987

ASK E.D.

continued from page 71

Dear Ed,

I planted some seeds six months ago under fluorescents and then moved them under a halide. They are starting to show sex under 20 hours of light. They seem to be a hardy *indica*: short, stout, with wide leaves. Is this common for *indica* or does it have *ruderalis* in it?

—Ted The Head
Olympia, Washington

Dear Ed,

I am having trouble getting *sativa* buds to mature indoors. It went through several stages of heavy flowering, but the calyx refuses to fill out. The females have been flowering for a full 90 days with a 400-watt MH lamp in a 4' x 5' closet. The lights are on 10 hours and off 14. What can I do to induce the calyx to mature?

—Injected Blown Big Block
Odessa, Texas

Although the light-darkness cycle is the method most cannabis plants use to regulate flowering, some varieties use other cues or induce flowering internally.

Pure *ruderalis* varieties begin to flower within days or weeks of germination. Since *ruderalis* is native to cold temperate areas where the summer weather varies from year to year, the population's survival is dependent upon producing seed before the weather changes. By producing and dropping seed throughout the life cycle, the plant assures a next generation.

At the equator, where the plants are the famed equatorial *sativas*, there is no variation in light cycle throughout the year; day and night are evenly divided at 12 hours. Obviously, the plants need other cues for flowering. It could be a change in the moisture level of the soil. Other possibilities that have been offered include a slight temperature change.

Dear Ed,

Just thought I'd drop a line to thank "A Skunk Grower" for the tip about termites. The bad news is that no one can tell me where to obtain cedar chips, and, in fact, I was told that no such wood exists. Please clarify the situation. Is this information fair dinkum (Aussie slang for reliable)? Is there an alternative name for wood?

Yours sincerely,

—Desperate,
New South Wales, Australia

Cedar is a tree of the pine family (*genus Cedrus*). It has evergreen needle leaves and a very fragrant wood. There are many species. The wood re-

continued on page 75



ROCK WOOL

Rockwool is the growing medium of the future. Imagine a sterile medium, providing optimum air to water ratio. So unique, new nutrients actually displace the old residuals out the base.



PREDATOR MITES

When it comes to pest controls, we wrote the book! We've turned our experience with natural pest controls into problem-solving products for you. When you have a pest problem, give us a call.



INDOOR GARDEN SUPPLY

NORTH STORE

108 N. BARRINGTON STREAMWOOD, IL 60107 (312) 289-4545

SOUTH STORE

599 WILLIAMS ST. THORNTON, IL. (312) 877-1616

ALTERNATIVE

Garden Supply Inc.

The Predator Mite People

Call for a free brochure

(800) 444-BUDS (2837)

CHICAGO

INDOOR GARDEN SUPPLY

Store & phone hours M-Sat 10-7:00
See pages 8 & 9 for a list of some of our HYDROFARM products.

Need NEW ID? PRIVACY?



How to get new ID from government sources. State ID's, Birth Certificates, Drivers Licenses, new SSN, Passports, Diplomas, Degrees by mail. Get better jobs. Cover negative records. Solve fingerprint problems. Disappear. Start life over!

#1 \$15.95



Clear bad credit. End debts. Establish new credit. Receive all kinds of credit cards. Establish new credit. Clever credit maneuvers. All your "credit rights" and more!

#2 \$9.95

HOW TO BEAT THE BILL COLLECTOR. Sharpest rules of the credit game. #3 \$5.95

100 WAYS TO DISAPPEAR. Inspiration for privacy. #4 \$3.95



Create your own privacy! Discover best low-profile methods. Financial privacy. Cash income opportunities. Banking alternatives. Secret hiding places. Avoid violence, surveillance. Hide your assets. Protect mail, telephone. Using other "names." Disguises. Codes. Hideouts. Deep cover. Multiple addresses, and more!

#5 \$18.95



More on new identity. Legal name changes. How to disappear using legal changes. Adopt an alias. Laws on fake ID. "Take-over" ID. Codes used on drivers licenses, SSN, military SPN. Avoid passport problems. Do-it-yourself ID. Sources of private-issue ID. Much more!

#6 \$17.95

SPECIAL COMBINATION OFFERS

Books 1-4 \$29.95 All 6 Books \$49.95

Total of Order:

(Calif. residents add 6% sales tax)

\$ _____

Postage & Handling
(Your choice)

{ Fourth Class
FIRST CLASS

2.00
 5.00

TOTAL: \$ _____

Send current Book Catalog — FREE.

SEND TO: _____

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

EDEN PRESS • 11623 Slater "E" • Box 8410-HT • Fountain Valley, CA 92728

NOW OPEN



HYDROPONICS

INDOOR / OUTDOOR
GROWING SUPPLIES
STORE & MAILORDER

We Stock:

• 1000 w Super Metal Halide
\$199

- 1000 w H.P. Sodium
- 400w Halide & H.P. Sodium
- Hydroponic Systems • Books
- Light Movers • Drip Watering

• **ORGANIC BAT GUANO**

- Soilless Mixes • PH Meters
- Containers • Grow Bags
- CO₂ SYSTEMS • Water Bug!
- ECO & DYNA Grow • Pumps
- Sta-Wet • Timers • Tools
- Organic Fertilizer

• **WORM CASTINGS**

- Exhaust Fans • Reflective Mylar
- White Plastic • Air Filters
- Negative Ion Generators

• **ROCKWOOL Distributor**

• **Seabird Guano**

• **Horizontal Professional
Greenhouse Lights**

• **Our Own Horizontal Lights**



**CALL FOR PRICES
& FREE CATALOGS**

USA (800) 255-0121

N.Y. (718) 727-9300

Write or visit

EAST COAST HYDROPONICS

432 Castleton Avenue

Staten Island, New York 10301

Free parking • 5 minutes from interstate

One of Nevil's fields devoted to **Ruderalis** breeding.

NEVIL ON RUDERALIS

continued from page 67

length, the plant seems to sense that the days are decreasing, and responds by putting most of its energy into flowering and seed production if fertilized. No matter what light regime the plants are under, seed production by fertilized flowers continues normally. As the seeds mature they are dropped from the plant.

"If a plant becomes heavily pollinated, all growth other than seed production stops until the seeds mature. However, after the seeds mature, the plant will restart flower production, season permitting. From a seedbreeder's point of view, this means I can get two generations out of one long season. I start them off in February in a greenhouse, picking out the best plants early in the season, and I pollinate those with preselected males. I harvest the seeds in late May or early June and repollinate the plants several weeks later. Of course, I start new plants from seed instead, since I am interested in perfecting the plant.

"*Ruderalis* is very hardy and well designed to withstand harsh, changing conditions. When it is hybridized, it lends vigor in a synergistic effect when outcrossed with more domesticated cultivars. Some of my biggest buds are produced by *ruderalis* hybrids. The percentage of *ruderalis* in these buds is minimal. Nevertheless the increased bud size and vigor of the plant remain. This could be caused by a gene on the same chromosome as the early flowering gene or a link between the alleles.

"*Ruderalis* flowers up to September 21, and then it senesces a week to ten days later. The first week of October,

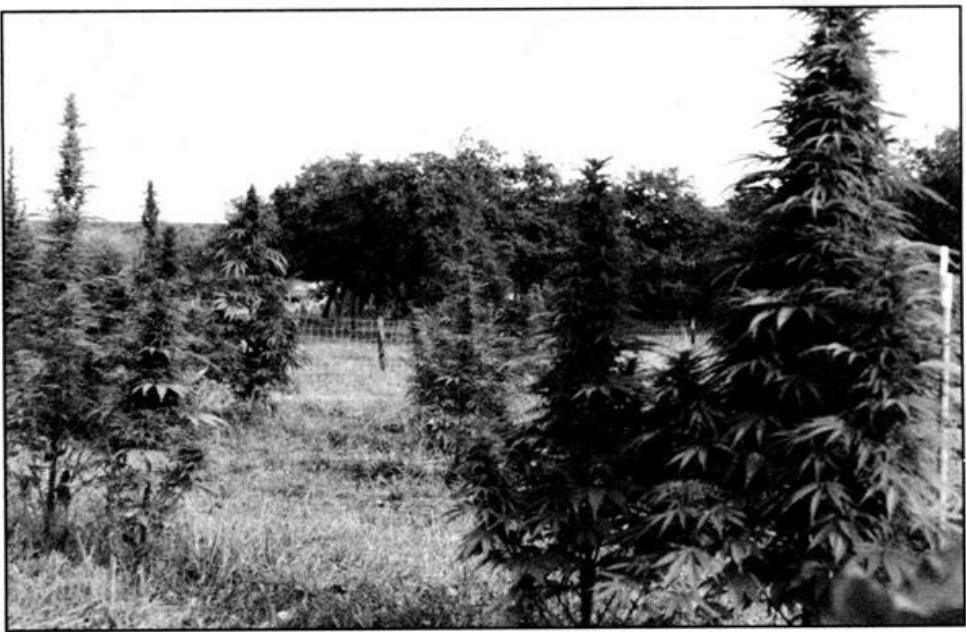
buds sometime reach astounding sizes—for instance, a live bud two feet long and six inches wide at its base (on a living plant).

"Once the RFC is introduced into a line, the flowering characteristics are a lot easier to work with. It is particularly useful with equatorials, which sometimes take up to six months to finish up after induction of the flowering cycle. The runniness and hairiness are gone. The advantages are obvious to anyone. Although no experiments have been done regarding plants under high-light conditions, one would assume the buds would grow larger and more compact. On the other hand, the shorter daylength of lower latitudes would also have an influence. We do not know what happens when the plant never gets more than 14 or 15 hours of light.

"When the plant is crossed with *indicas*, some interesting things happen. In northerly latitudes, *indicas* have only a limited amount of time before the introduction of flowering and ripening. When the RFC is introduced the plants have a full summer of flowering and develop much larger buds than normal. These plants, well over 90% *indica*, produce resin like the full-blooded Afghani relatives.

"Cuttings do best under constant light. They tend to flower off when rooted under less light.

"The main use for *ruderalis* is what it was naturally developed for: to start off in May or June, flowering during the summer and ripening off in early October. It might have some commercial use to a grower who is willing to ripen only a partially ripened, somewhat leafy bud for a June harvest, but as a connoisseur, that doesn't interest me." ●



NEVIL — THE SEED BANK

continued from page 73

tains its odor, which repels insects and other pests, for a long time. In the U.S., closets are sometimes lined with cedar to repel moths. The main species growing in the U.S. is known as *Cedrus atlantica* and has several varieties including giant, medium and small-sized groups.

I am surprised that your informants were not familiar with cedar. Cedars of Lebanon are mentioned in the Bible. Those same eroding hills forested in cedar during Biblical times are now used to grow the famous Lebanese hash.

Dear Ed,

In the July '87 HIGH TIMES, Ag from Riverside suggested using 1,1,1, Trichloroethane in place of petroleum ether for making hashish. I know nothing about making hash, but I have over ten years of experience in aircraft maintenance.

1,1,1, Trichloroethane is used in cleaning aircraft parts. It's an excellent solvent when used properly. But it's extremely dangerous when it comes in contact with living creatures. Below is a list of what happened to my co-workers and myself.

1. I've developed skin cancer.
2. 1,1,1, Trichloroethane dissolves the fatty tissue in the body. Put your finger in it and watch it turn white, or throw in a piece of fat and watch it dissolve.
3. It displaces oxygen. One quart in a 10' x 10' room can cause unconsciousness and possible death.
4. It causes headaches, dizziness, disorientation, nausea, vomiting, and heart palpitations.

All chlorinated solvents should be considered unhealthy. If you are unsure as to what a specific chemical does and what its hazards and safety precautions are, contact the wholesaler and request a copy of the Material Data Safety Sheet. If the wholesaler won't help, contact the EPA.

Please don't use this shit.

—Red,

New Bern, North Carolina

Thank you Red for your very important information. New methods of hashmaking are being developed now anyway, so these crude chemical methods will soon be a thing of the past.

Dear Ed,

I was writing in reference to your column in the June '87 issue of HIGH TIMES. "Chiles," from Northfield, New Jersey, asked about the best product for removing trapped resin in paraphernalia. I have found that Zoom, a product distrib-

continued over

Phone: (617) 429-1716 or write:
LABORATORY DEVICES
Box 402, Holliston, MA 01746-0402, U.S.A.

Attention Mel-Temp Owners
Laboratory Devices is pleased to offer a thermocouple kit which we guarantee will dramatically improve the performance of your Mel-Temp!

INDOOR SUN SYSTEMS

61 ALLWOOD AVENUE
CENTRAL ISLIP, NY 11722

FOR ORDERS OR FREE CATALOG CALL
TOLL FREE - NATIONWIDE

800-999-EAST
OR (3278)

800-999-FAST

MasterCard
COD
VISA

EITHER ONE WILL GET YOU FASTEST DELIVERY
FOR ALL YOUR INDOOR GARDENING SUPPLIES

MS 1000	\$199.00	CO ₂ UNIT	\$159.00
HPS 1000	\$264.00	MINI LITES	\$110.00

VISIT OUR SHOWROOM
Hours: M-F 10-5 Sat. 10-2

HIGH TIMES ▶ 75

DETECT PLANT SEX

Don't Waste Growing Space.
Get Rid of Male Plants.

GROW ONLY FEMALE PLANTS

Each Female Plant Detection Kit Contains Everything You Need to Detect the Sex of Ten Plants.

WORKS ON ALL PLANTS • Just Starting or Full-Grown
• Outdoors or Indoors
• All Seasons

100% EFFECTIVE /

SATISFACTION GUARANTEED OR YOUR MONEY BACK

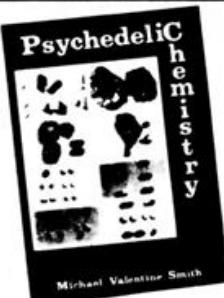
RUSH ME 4 KITS \$19.95
 1 KIT \$7.95 8 KITS \$34.95
 2 KITS \$13.95 20 KITS \$79.95
 100 KITS \$345.00

NAME _____
ADDRESS _____

Diesel Botanical Research and Study Group
P.O. Box 7665, Stanford, CA 94305
NOW AVAILABLE IN EUROPE, TOO.
Ask for one at your local shop.



PSYCHEDELIC CHEMISTRY



PSYCHEDELIC CHEMISTRY
by Michael Valentine Smith

5 1/2 x 8 1/2, 204 pp, Illustrated, soft cover.

The best and most complete book ever written on how to manufacture drugs! Out-of-print for years, now available again in a completely revised and updated edition. THC, Magic Mushrooms, Mescaline, Hallucinogen, Muscimole, LSD, Cocaine, and much, much more! Use the handy coupon below to order your copy today -- you will be very pleased, we know.

Loonpanics Unlimited
PO Box 1197 Pt. Townsend, WA 98368

Please send me _____ copies of PSYCHEDELIC CHEMISTRY. I enclose \$14.95 + \$2.00 postage & handling for each copy.

Name _____
Address _____
City _____
State _____ Zip Code _____

Put your plants in the best light.

With our exclusive Mini-Might Grow Lights.

Our popular HPS150 uses a high pressure sodium lamp with an ideal color spectrum for budding and flowering. Costs only 15¢ a day to operate.

Our new MH175, with a metal halide lamp is perfect for all stages of plant growth. Only 18¢ a day to run.

SALE PRICE EACH \$99
Reg. \$139
PLUS \$5.00 shipping anywhere in USA.



New

175 watt Metal Halide Lamp (15,000 lumens).

150 watt High Pressure Sodium Lamp (16,000 lumens).

See complete product listing inside front cover.



ENERGY SAVERS UNLIMITED, INC.

22138 SOUTH VERNON AVE., C, TORRANCE, CA 90502

Call Toll Free: (800) 421-2994 (outside California)

(800) 538-3400 (in California)

ONE YEAR PARTS & LABOR GUARANTEE —
30 DAY MONEY BACK GUARANTEE — MOST
ORDERS SHIPPED IN 24 HOURS — C.O.D.
ORDERS WELCOME — NO DEPOSIT REQUIRED
— QUANTITY PRICES AVAILABLE — CALL
FOR FREE CATALOG.

ASKED

continued from previous page

uted by Amway Products does a very effective job. It does not affect plastics, and requires little or no brushing.

Hope this helps.

—Vicky,
Lafayette, Louisiana

Dear Ed,

I grow in a 12" x 10' x 7' grow room using one 1000-watt HPS and one 1000-watt MH. My last crop I harvested 3.5 pounds of pure bud. My problem is that the stems of my plants are very weak and I have to use stakes to hold them up because of the dense foliage. I am using a 20-10-20 fertilizer and maintaining a temperature during the day of 75-82°F and CO₂ enrichment.

—The Gentleman Farmer,
Louisville, Kentucky

I would change the fertilizer to one with a lower percentage of nitrogen (N), which encourages fast stem growth, and raise the percentage of potassium (K) which promotes stem strength.

The form of N which you use might also be a problem. N is found in two forms as the ammonium ion (NH₄⁺) and the nitrate (NO₃⁻). The ammonium form can be used by the plant immediately to synthesize amino acids (proteins). The nitrate form must be altered before the plant can use it. When the ammonium form is given to plants under low-light conditions, it promotes rapid stem growth. The ammonium form does not promote as much growth, but the stems are stronger.

Another reason that the stems are weak may be that they do not get enough of a breeze. When plants blow in the wind, their stems suffer tiny tears in the fibers. These tears are repaired by new tissue growth, which reinforces the break. When this happens regularly, the stems become thicker and stronger. This is a natural process outdoors. Indoors it can only be supplied by creating a wind. It is better to have a strong breeze on the plants periodically for a short time than a light breeze continually, because the strong breeze will cause the plants to move, breaking the fibers and promoting stem growth.

Of course the plants could also use a gentle breeze all the time. The leaves maintain a microclimate at their surface. This thin layer of air is slightly warmer and has a lower proportion of CO₂ and a higher proportion of O₂ than the surrounding air during the lit cycle. A breeze helps to remove this stale air and replace with higher CO₂ air. During the dark cycle, when the

plant respires, it uses O₂ and produces CO₂. In this case a breeze removes the high CO₂ air and replaces it with high O₂ air.

Dear Ed,

I think that we need to do something about the price of marijuana. I think the prices suck!

I'm an everyday user of marijuana, and it ruins my buzz when I have to spend a fortune to get high. What happened to the good old days?

I think it would be a good idea if you would print more articles about doing something about it! And I'm sure that goes for the rest of us too.

Thanx,

—N.T.B.O.S.,
Romulus, Michigan

When were the good old days? In 1967? In 1967 you could buy a pound of Mexican for about \$100. The pound was 1/2-2/3 seeds, and the remaining material had a THC content of about 1%. Out of that pound you'd get about 1.9 grams of THC. (454 x .41 x .01 = 1.8614) That comes to about \$52.63 per gram of THC. However, inflation since that time is about 370%, so the cost of a gram of THC in 1987 dollars is about \$194.74.

Presently, you can buy a pound of good sinsemilla in New York for about \$3,000. This contains 95% smokeable material and a THC content of about 5%. Total THC comes to 21.6 grams, with a per-gram cost of about \$139.11. The "high-priced" sinsemilla costs only 71% of the "low-priced, good old days" pot.

In almost any industry in America the market is dominated by only a few concerns. Autos, computers, appliances, cigarettes, alcohol and TVs are manufactured by only a few corporations. Any of these companies can affect the price in the market by their actions. Marijuana is one of the few industries that is a true competitive market. No one buyer or seller or group can affect the market price because no one has a major share of the market.

The market price of marijuana represents a demand/supply equilibrium determined by the "invisible hand" of the market. So there is only one thing that you or I can do to affect the market. Either we can raise the price by buying and increasing the "demand" side of the market. Or we can lower the price by selling and contributing to the "supply" side of the market. Of course, in order to sell one must either grow or import. Middlemen do not count since they neither increase nor decrease the supply, they just transfer it.

continued on page 83



SINSE-WARE

YOU PUT A LOT OF EFFORT, TIME, AND MONEY INTO YOUR GARDEN, GET THE MOST OUT OF IT! OUR USER-FRIENDLY SOFTWARE WILL LEAD YOU THRU OUR PROGRAMS TO HELP YOU KEEP TRACK OF YOUR PROGRESS AND TEACH YOU TO DO BETTER. YOU MAY NOW KEEP YOUR PERSONAL RECORDS WITHOUT WORRY OF DETECTION ON OUR COMPUTER SOFTWARE THAT IS SPECIFICALLY DESIGNED FOR THE GROWER. WE FEATURE A DUMMY FRONT TO MISLEAD THE UNKNOWING, AND SECRET PASSWORDS THAT YOU DETERMINE! ONLY YOU WILL KNOW HOW TO ACCESS YOUR PROGRAM!

*** SAFE-FILE ***

FIRST LEVEL PROGRAM DOES PRICE AND WEIGHT CALCULATIONS, AND ALSO MAKES LABELS AND SPECIAL INSTRUCTIONS.

SECOND LEVEL PROGRAM KEEPS YOUR PERSONAL (personnel) RECORDS ON A DOUBLE ENTRY LEDGER. KNOW WHO, WHEN, WHAT TYPE, WEIGHT, PRICE, PAYMENT, BALANCE, ALL ON ONE SCREEN, AT YOUR FINGERTIPS. BOTH LEVELS PROTECTED WITH YOUR PASSWORDS, AND WILL SELF DESTRUCT UPON INTRUSION!

*** YEARLY REPORTER ***

A YEARLY CROP OBSERVATION PROGRAM FOR YEARLY COMPARISONS AND GRAPHING OF YEAR END RESULTS, ALSO USING OUR SECRET ENTRY TECHNIQUE.

*** PLANT DOCTOR ***

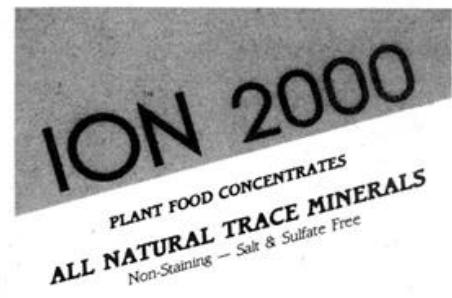
A SUPER EASY TO USE TROUBLE SHOOTING PROGRAM FOR QUICK REFERENCING OF GARDEN PROBLEMS, THEIR CAUSES, AND REMEDIES.

SAFE-FILES 59.95
YEARLY REPORTER 49.95
PLANT DOCTOR 39.95

REMEMBER, YOUR BEST SENSE WILL COME FROM SINSE-WARE

P.O. BOX 771039
WICHITA, KS 67277
316-945-8700

WE WRITE CUSTOM PROGRAMS UPON REQUEST
VISA AND MASTERCARD ACCEPTED
CONFIDENTIALITY ASSURED



For Use In Soilless or Hydroponic Systems
pH compensating — increases C.E.C.
Fortified with E.B.B. (enzymatic buffer blenders)

1 Tsp. (trial size) makes 1 gallon \$2.00
1 Pound makes 100 gallons \$14.00

—WE PAY POSTAGE!

We have seed vigorizers

FTRW. INC. TOLL FREE:
Box 538 1 (800) 342-3833
Moses Lake, WA 1 (509) 762-9899
98837



COPYRIGHT 1987

**Our Customers Say That We Have:
The Largest Selection
The Quickest Service
The Nicest Catalog
The Best Prices**

We Sell More Than Just:

Halides & Sodiums

Natural & Commercial:

Pest Controls, Fertilizers

Growing Mediums

Climate Controls:

Thermostats, Rheostats

Fans & Blowers

Watering Systems

CO₂ Systems



...over 30 pages of values!



**High Light Enterprises
Call For Order or Free Catalog**

1-800-342-1981

Eugene, Oregon (503) 342-1981

10 a.m. - 6 p.m. PDT



GROWING AIDS

EXOTIC MUSHROOM
Spores and Books. Catalog \$2. FS, PO Box 420435, Sacramento, CA 95842-0435.

AMMONIA NITRATE
No organic can compare. Indoor-outdoor. Triple growth, triple yield. \$14.95 to E. Peter, PO Box 11368, Indianapolis, IN 46201.

5,000 OPIUM POPPY SEEDS
with instructions—\$5 • Two by three inch ziplock bags—50 for \$3.50 • Three by five inch ziplocks—50 for \$4.50 • Mannitol ½-lb.—\$7.50 • Inositol ½-lb.—\$15 • Lactose ½-lb.—\$25 • We pay postage. You get it quick and unmarked. Faunas Health, PO Box 1236, Lawrence, KS 66044-8236. Satisfaction guaranteed!!

HYDROPONIC FLORAL
Cubes, just like Rockwool, only cheaper. Cutting size—\$.50, three-foot plant size—\$1.75, five-foot plant size—\$2.25. Instructions included. (603) 891-1732.

POWDERED ROOTING HORMONE
Have rooted cuttings in two weeks. 100 clone supply, \$5.00. (603) 891-1732.

SPIDER MITE PREDATORS—\$35/1000, Whitefly Parasites—\$27.50/1000, Ladybugs—\$5.50/1000, postpaid, fast delivery. CODs, credit cards. Free brochure. Nature's Control, PO Box 35, Medford, OR 97501, (503) 899-8318.

GROWING TRAYS
For Hortiwool Bags or Grodan Slabs. (616) 382-4651.

EARTHWORM CASTING 10 lbs. \$9.95 postage paid. Cape Cod Worm Farm, 30 Center Ave., Buzzards Bay, MA 02532. (617) 759-5664

LIGHTS, ROCKWOOL, PREDATOR MITES AND MORE. Retail and mail order sales. Authorized retail centers for Applied Hydroponics' products. Call 1-(800)-444-2737 for free brochure.

EAST COAST HYDROPONICS now open! Lights and organic gardening supplies for all your growing needs. Come see our new showroom or write for a free catalog. 432 Castleton Ave., S.I., NY 10301. Or call East Coast Hydroponics Nationwide: 1-(800)-255-0121 • NY, (718) 727-9300.

HAWAIIAN DELIGHTS: Baby or Regular Hawaiian Wood Rose Seeds for \$20.00; One Hawaiian Panaeolus Cyanescens Spore Print for \$15.00; One Bag of Hawaiian Sterilized Top Soil or Compost for \$15.00; Betel Nuts \$10.00; Kava-Kava \$20.00; Imported Poppy Seeds \$10.00; One Dozen Anthurium Flowers for your Lover, delivered \$30.00. Island Spore Co., PO Box 8055, Honolulu, Hawaii 96830.

EXHALER! DON'T LET smoke get you busted. By using the Exhaler and your favorite perfume or cologne, you can now keep the odor of smoke out. Money back guarantee. Send \$10.00 to: Walts, PO Box 24684, Dayton, OH 45424.

CLASSIFIEDS

GROWERS SUPPLIES

Confidential. Drippers, lights, fertilizers, timers, much more. For more information, contact Full Circle, PO Box 6, Redway, CA 95560. 1-(800)-426-5511.

MERCHANDISE

IS IT TRUE YOU CAN BUY Jeeps for \$44 through the U.S. government? Get the facts today! Call (312) 742-1142, ext. 4648.

KNOSE CANDY-WRITE SLS
Ent. P.O. Box 10223, Riviera Beach, FL 33404.

UNDERCOVER HIPPIES. Tie-Dyed T-shirts, \$7.67; Underwear, \$5.50. Available in Orange Blotter, Red or Purple Microdot. Send to Pat Bercik, P.O. Box 191, Harrison City, PA 15636.

COUNTERSURVEILLANCE, Security? 52 products: alarms, bulletproof, detectors to wireless, voice scramblers! Catalog, \$2: SPYPRO-044TH, P.O. Box 45521, Seattle, WA 98145.

SPIDER MITE CONTROL! Send for free information. Include self-addressed envelope. O. Solutions, 5825 Telegraph Avenue, #62, Oakland, CA 94609.

ROLL YOUR OWN cigarettes? Use Filters—safer, healthier. Sample and instructions—\$5.00. JCSCO, Box 901-T, Arlington, MA 02174.

SMOKER'S CATALOG \$2.00. Pipes, waterpipes, much more! Tobacco World, P.O. Box 74946, Oklahoma City, OK 73147 (U.S. money only).

UNDERGROUND BOOKS Controversial and unusual. Catalog—\$2. FSS, PO Box 232, Fair Oaks, CA 95628-0232.

MINI PIPE DEAL—1/\$5 OR 3/\$10. Genuine rosewood smoking pipes. Specify xs/sm/m. Tobacco World, P.O. Box 74946, Oklahoma City, OK 73147.

SUPER SCENT Free samples to first 100 callers. P.D.C. (513) 851-5999.

100% PURE URINE, 4-OZ.— \$27.00; each additional 4-ozs.—\$19.00. Check or money order. J.R., PO Box 4313, San Leandro, CA 94579-0313.

MARIJUANA URINE TEST BY Mail. Stays in your system 2 to 15 weeks. Don't risk your future, call 1-(800)-LAB-FAST; California call (805) 541-3135.

MISCELLANEOUS

TERM PAPERS—15,278 available! 306-page catalog, rush \$2. Research, 11322 Idaho, #206HZ, Los Angeles, CA 90025. (213) 477-8226.

FOREIGN PASSPORTS

21 countries. Loopholes. "Back doors." Latest opportunities, possibilities. Free details. EDEN PRESS, Box 8410-PP, Fountain Valley, CA 92728.

INSTRUCTIONS

ROCKS FROM POWDER Increase profits! Easily built, plans and directions—\$20.00. Plans, PO Box 30341, Cleveland, OH 44130.

UNDERGROUND Connections! \$2 cash. Occupant, Box 242, Warren, Michigan 48090.

PERSONALS

WITCHCRAFT MOTHER Nature's own high, power and serenity. Gavin and Yvonne, Box 1502-H, New Bern, NC 28560.

YOU HAVE A PURPOSE, YOU have a destiny. Wisdom of the ancients revealed in this book. Send \$6.00 to MHJ Publications, PO Box 13669, Columbus, OH 43213.

BEHIND BARS

I AM A WHITE MALE, AGE 32, 155 lbs, 5'6", with long brown hair, brown eyes, and brown beard. I'm looking for someone who is real! I love bikes and love to party. Sure could use a true friend. Write: Ronnie Lee Moore, Rt. #1, Box 36, Jackson, NC 27845.

I'M A 22-YEAR-OLD, ORIENTAL man in prison seeking a classy lady between 20 and 30 years old for correspondence and friendship or marriage. Please write to: Lowlin Sarpharn, D-05775, Room 3137-X, PO Box 8101, San Luis Obispo, CA 93409-0001.

IRISH-ITALIAN MAN IN PRISON, 37 years old, 6', 185 lbs. Would like to hear from any real and sincere lady out there. Write to: David Dino Barnes, #14404 U6-W270, PO Box 607, Carson City, NV 89701.

MAN INCARCERATED, VERY lonely, no family or friends, wishes to correspond with any age people for friendship. Please write: Ricky Cooper, #19118, PO Box 607, Carson City, NV 89701.

BLANK PHOTO ID CARDS
Make laminated Photo IDs on any typewriter. All materials furnished for 5 IDs. Good in All States and Canada 5 FREE BIRTH CERTIFICATES
5 FOR \$10
CARDINAL PUBLISHING DEPT. B23
2071 Emerson, Box 5200 • Jacksonville, FL 32207

Microflame Super Cub Gas Torch

• HIGH QUALITY HEAT
FOR ALL YOUR SMOKING NEEDS
• SMALL AND LIGHT ENOUGH TO
FIT IN ANY POCKET
GET FREE SUPER CUB
REFILL WITH PURCHASE
SEND MONEY ORDER FOR
\$10.99 • \$2.00 P/H TO:
TAM ENTERPRISES
P.O. BOX 23973-FT. LAUD., FL 33307

ROCKWOOL WHOLESALE

Hydroponic Metal Halide
Rockwool Fertilizer

Growers Supply
Hrs. 680 Maple Hill Dr.
10AM—6PM Kalamazoo, MI
Closed 49009
Monday 349-8566



EXCITING NEW BOOKS

1. CIA LOCKS, PICKS & CLICKS	\$9.95
2. THE COMPLETE GUIDE TO LOCK PICKING	\$19.95
3. HOW TO GET ANYTHING OUT OF ANYTHING	\$29.95
4. THE COMPLETE BOOK OF INTERNATIONAL SMUGGLING	\$29.95
5. HOW TO GET ANYTHING ON ANYBODY	\$29.95
6. HOW TO GET ANYTHING IN ANYBODY	\$29.95
7. HOW TO GET ANYTHING OUT OF ANYBODY	\$29.95
8. HOW TO GET ANYTHING ON ANYBODY	\$29.95
9. HOW TO GET ANYTHING IN ANYBODY	\$29.95
10. HOW TO GET ANYTHING OUT OF ANYBODY	\$29.95
11. HOW TO GET ANYTHING ON ANYBODY	\$29.95
12. HOW TO GET ANYTHING IN ANYBODY	\$29.95
13. GET EVEN 2	\$19.95
14. GET EVEN 3	\$19.95
15. GET EVEN 4	\$19.95
16. DIVORCE, DIRTY TRICKS	\$19.95

WARNING: Buying and/or selling is a violation of the privacy of other people and these products should not be used in any form of misrepresentation. Please consult with the proper authorities before operating.

MADE CHECK OR MONEY ORDER PAYABLE TO:

THE SPY SHOPS

P.O. BOX 1738 ENGLEWOOD CLIFFS, NJ 07632

MONDAY-FRIDAY 9AM-5PM SATURDAY 9AM-4PM

INCLUDE \$2.00 FOR EACH ITEM ORDERED TO COVER SHIPPING AND HANDLING.

10 DAY MONEY BACK GUARANTEE

ROCKWOOL

GROWING MEDIUM

FOR A DESCRIPTIVE BROCHURE ON OUR COMPLETE LINE OF GARDEN SUPPLIES WRITE OR CALL:

FULL CIRCLE

P. O. BOX 6-H
REDWAY, CA 95560
(707) 923-3988

BECOME COMATOASTY

WITH

COMA

THE WORLD'S LARGEST BONG

This immense bong stands an awesome 5 1/2 ft. long, has a whopping 4 1/2 in. chamber diameter with a tapered mouthpiece and is equipped with a huge party size bowl. All parts proudly produced and assembled in the U.S.A. Simple disassembly for storage and cleaning.

Easily the most powerful water pipe marketed.

LET ONE GET YOU

in time for

CHRISTMAS!



FOR DETAILS CALL: 1-201-366-0032
OR SEND \$49.50 + \$6.00 SHIPPING
TO: **RUSH HOURS**
103 Washington St., Suite 363
Morristown, New Jersey 07960

ATTENTION

Clean Urine Test

Clean up your urine instantly. Use new formular No.28, for external use only. Not available at any drug counter. 1 sml. pkg. per test \$29.95.

Send cash or money order to:

J&L LAB CO.
P.O. BOX 1135, SUITE NO. 3
SOUTHFIELD, MICH. 48075

**The HIGH TIMES Classified Reaches Over 2 Million People Each Month.
Whether Your Message is for Business or Pleasure,
put it in HIGH TIMES for Maximum Results.**

RATES

One time ad: \$4.00/word

Discount for contracts:

Three consecutive ads \$3.75/word

Six consecutive ads \$3.50/word

Twelve consecutive ads \$3.25/word

CLASSIFIED DISPLAY

\$125 per column inch

Column width is 1 1/8 inches.

Discount for contracts:

Three consecutive ads \$115/inch

Six consecutive ads \$105/inch

Twelve consecutive ads \$95/inch

All display ads must be delivered camera-ready.

TO ORDER

MINIMUM AD IS TEN WORDS

Post Office Box #'s and telephone #'s count as two words each.

All ads must be typewritten.

ALL ADVERTISING MUST BE FULLY PAID IN

ADVANCE WITH CHECK OR MONEY ORDER, NO CASH.

Ad will appear 60 to 90 days after receipt.

All ads are accepted at the discretion of the Publisher.

No advertisements for chemicals, chemical supply houses,

formulas, extraction methods or synthesis reports will

be accepted.

Call for Advertising Acceptability Policy (212) 972-8484

Mail to: HIGH TIMES Classified

211 E. 43rd Street, New York, NY 10017

Please include a sample of your product or catalog with your ad, and your street address and phone number.

SPORES & BOOKS

BOOK & SPORE CATALOG \$2.00
MUSHROOM RESOURCE GUIDE \$15.00
AMANITA MUSCARIA SPORES \$10.00
THE MUSHROOM CULTIVATOR \$24.95
PSYCHEDELIC CHEMISTRY \$14.95
MAGIC MUSHROOM HANDBOOK \$10.95
GROWING WILD MUSHROOMS \$5.95
PS. MUSHROOMS & THEIR ALLIES \$12.95
ROTTEN WORLD OF FUNGUS-VHS \$34.50
MARIJUANA GROWING TIPS \$10.95
INDOOR MARIJUANA HORTICULTURE \$14.95
MARIJUANA GROWERS GUIDE \$19.95
SINSEMINA TECHNIQUE \$12.95
GROWING INDOORS \$8.95
THINK & GROW RICH-CASSETTE \$14.50
POSTAGE PAID! IMMEDIATE DELIVERY!
F.S. P.O. BOX 420435
SACRAMENTO, CA 95842-0435



PIGGY MALONE'S®
NOMAD® Catalog of
smoking accessories, gifts,
etc. Send \$1 postage & handling
refundable with first order to:
P.O. Box 10073
Berkeley, CA 94709

GROW RIGHT WITH HALIDE LIGHT



M A H

DIAMOND LITES
EAST COAST HALIDE &
HYDROPONIC DISTRIBUTOR
151 ALKIER ST. BRENTWOOD
N.Y. 11717 (516)231-9472

VISIT OUR SHOWROOM

MON-FRI 12-8

SAT 10-8



Copyright © 1983



slash-n-fake

extra storage chamber
accepts Visa and m.c.

Send check or money
order for \$8.00 to....

FADS 448 Miller ave.

Brighton, Co. 80601, call 303/659-9476. clip Ad.

send for Free catalog, has wild, crazy gifts,

& smoking access.

Great gift! Get it ••• Now!"

GRAMMY SCALE SALE

All metal, w/case, weighs
from 0-99 G. and ozs. \$3
for one or \$5 for two.
Send address & payment
to Tamarack Marketing,
P.O. Box 434, Hoosick
Falls, NY 12090. We pay
for shipping!

— A HANDY ITEM —

Deering Kit

* Contents: CSCAL, and accurate, portable scale for measurement of gold, silver. Converts to carat scale for weighing precious stones such as diamonds.

* PREP2 the Deering Preparation System. A combination spice grinder, sifter and storage system. Perfect for seasoning restaurant cooking to personal taste. Used to reduce prescription pills too large to swallow comfortably. Grates/pulverizes—helpful in kitchen.

* DPC01, a small pocket container. Carries salt or sugar substitutes for anyone on a controlled diet who cannot eat all meals at home. Air and water tight. Suitable for woman's compact or contact lens carrying case.

* DFUNL, a convenient system that permits easy transfer of medications to DPUCK, a larger storage container.

Call 1-800-334-7152 Ext. 25
24 hrs.

VISA/MC
Send check
or M.O.
to
Garry Engineering
2250 Sunrise Blvd.
Rancho Cordova, CA 95670

Each Kit
\$92.50
Money back guarantee
Shipped within 14 days



AT LAST!! A LEGAL HIGH!!

Puts a smile on your face and makes you feel good all over. It's Laughing Gas, singer-songwriter Chet Novicki's collection of outrageously funny rock, blues, and country songs. Includes: *Your Mother Fools Around*, *Grandpa Went to Jail for Growing Weed*, *Herpes*, *The Problem Drinker*, and eight other instant classics. Absolutely hilarious! Great for parties—a real icebreaker. Or play it on the way to work and arrive with a smile on your face. These studio recordings with full accompaniment sound great, with catchy, hum-along melodies and laugh-out-loud lyrics that are too hot for radio! Satisfaction guaranteed or your money back. Available on cassette only. Just \$8.95 & \$1.05 postage & handling. Send your \$10.00 to:

TAKO-ICHI Records

Dept. M-5

P.O. Box 90181

Honolulu, HI 96835

All orders shipped 1st Class Mail.
Money Orders shipped immediately.
Personal checks must await bank
clearance. Order now!



1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18
19	20	21
22	23	24
25	26	27
28	29	30
31	32	33
34	35	36
37	38	39

Cost of Ad:

_____ words at _____ per word = _____ Total.

Payment must be enclosed with order.

(Check or money order only, please.)

Name _____

Address _____

City _____ State _____ Zip _____

PSYCHOACTIVE Books by Phone

24hrs/day UPS-COD Visa/MC

We specialize in selling books, offer largest selection and best service.	
MARIJUANA HYDROONICS high tech water culture	14.95
SECRET GARDEN MARIJUANA useful new info	14.95
CULTIVATORS HANDBOOK of MARIJUANA revised classic	14.95
INDOOR MARIJUANA HORTICULTURE indoor high tech	14.95
DELUXE MARIJUANA GROW GUIDE the best grow book	14.95
SPIRAL DLX MARIJUANA GROW GUIDE lays flat & lasts	19.95
MARIJUANA BOTANY definitive guide to plant	14.95
SINSEIMILLA TECHNIQUE new printing	14.95
MARIJUANA ALERT dangers of smoking pot	10.95
PEOPLES PHARMACY guide to medical drugs	5.95
MARIJUANA MOONSHINE VIDEO vhs grow class	39.95
MARIJUANA GROWERS HANDBOOK indoor grower's edn/Rosenthal	16.95
ED ROSENTHAL'S MARIJUANA GROWING TIPS new book	12.95
MARIJUANA QUESTION? ASK ED PICS, Q&A, ADVICE	16.95
MARIJUANA YOUR LEGAL RIGHTS legal guide	12.95
THE MARIJUANA QUESTION hazards of pot	24.95
HASHISH lavish oversize pictorial by Suomi	35.00
MOKSHA psychedelic writing of A. Huxley	7.95
MUSHROOM CULTIVATOR best 'shroom guide	24.95
SHAMAN WOMAN women writing on drugs	12.95
DRUG ANTIQUES guide to drug collectibles	12.95
DESIGNER DRUGS ecstasy, crack, china white, etc	19.95
THE CULTIVATOR pot field romance	6.95
INDOOR/OUTDOOR MARIJUANA GROWERS GD intro bk	5.95
MARIJUANA GROWER'S GD. audio cassette tape	7.95
MARIJUANA POTENCY up potency, hashmaking	10.95
SINSEIMILLA marijuana flowers, best color photos	19.95
MARIJUANA BEER how to brew is made	9.95
MARIJUANA AS MEDICINE medical use of pot	8.95
MARIJUANA MEDICAL PAPERS classics	19.95
PRIMO PLANT mountain girl shows how to do it	4.95
CANNABIS ALCHEMY isomers, hash oil	5.95
SEX DRUGS & APHRODISIACS sexual highs	4.95
FROM CHOCOLATE TO MORPHINE A. Weil	8.95
DIARY OF A DRUG FIEND by Aleister Crowley	8.95
PSYCHEDELICS ENCYCLOPEDIA definitive	12.95
LSD MY PROBLEM CHILD by A. Hoffmann	7.95
PSYCHEDELIC CHEMISTRY authoritative	14.95
MAGIC MUSHROOM HANDBOOK pocket field guide	9.95
PSYLOCYBE MUSHROOMS & their allies	12.95
COCAINE HANDBOOK best essential reference	24.95
COCAINE PAPERS by Sigmund Freud	8.95
COCAINE CONSUMER HANDBOOK testing	9.95
800-COCAINA professionals help users quit	4.95
CASH CROP Humboldt County saga of pot fields	8.00
COCAINE CONSUMER Cassette tape of classic bk	7.95
GETTING OFF COCAINE natural way to quit coke	8.95
PLEASURES OF COCAINE bk may save your life	5.95
WEED adventures of a dope smuggler, Mexico	9.95
THE WAY OF HERBS wonderful guide to healing	12.95
UNDERGROUND COMIX history w/ 1000+illstrns	17.95

select books above and write book price SUBTOTALS

FREE USA UPS shipping ON ORDERS OVER \$35.00

otherwise add \$3.00/book for USA shipping.

Canada postage add \$5/order, other Foreign postage add \$5/bk

COD fee \$3 Card fee \$2 POBox (no CODs) fee \$2

California residents add 7% sales tax

CHK or MO for Books & fees TOTALS

Make check payable to Books-by-Phone (personal checks held to clear)

credit card: MC Visa Exp date

card #: _____

Name _____

Address _____

City _____ State _____ ZIP _____

I am over 21 (sign) _____

Price and availability subject to change without notice. Drug education books are for sale to ADULTS ONLY to provide information in accord with 1st Amendment. Offer void where prohibited by law. No warranties are made, use is not advocated. Consult your physician.

Order by phone MC/Visa or UPS-COD
800/858-2665natl 800/992-2665calif
415/268-0869sf 415/548-2124info
operators take orders, give no info abt bks

POBOX 522 Berkeley, CA 94701
call or write for our free catalog

LETTERS

continued from page 14

HATES HOWARD

Recently I read an interview in *Penthouse* magazine with Howard Stern, the New York deejay who some of your readers seem to love. Allow me to quote his drug comment for you: "In the sixties, I was heavily into that shit—acid, 'ludes—and I think it took a piece of my mind right out the door. Personally, I think that LSD is the worst fucking drug in the world. I'm just thankful my kids aren't going around as mushrooms." I hope you print this letter and tell the worst fucking deejay in the world where to shove it.

I sure as hell ain't a mushroom, since I'm going to an Ivy League school.

—A serious tripper,
St. Louis, Missouri

Howard often talks about drugs on his program. Not everything he says is positive, and not everything he says is negative. The point is, he talks honestly about drugs, unlike the zookeepers and other deejay and veejay morons whose only drug message is "Just Say No." In fact, he's given *HIGH TIMES* a couple of plugs on his program, which reaches several million people. If you want to base your entire opinion of Howard Stern on what some *Penthouse* writer has quoted him as saying, that's your problem.

cannot condone the actions of a government who would compare marijuana with these dangerous substances.

For obvious reasons, this letter will be signed

—Anonymous

P.S. I am a horror story writer, and can see no greater horror than a government making a mockery of its people.

DUMP MARSHALL!

If the state would relax the law for 30 seconds, we would rip James Marshall's throat out! How can you endorse him when he trashes the greatest bands ever? We cancelled our subscription to *Rolling Stone* because of bigoted big-mouth crap, and we're sorry to say we may have to cancel this one! Let's hear it rockers! Vote to dump Marshall in the Top 100!

—M.S., D.K. & K.K.,
Charleston, Maryland

I dig your magazine heavily, so I'm going to be kind in my remarks, but James Marshall's (who the fuck is he?) article on the ten worst things about pop music is bullshit. Some of it I agree with—like his comments on David Bowie and Phil Collins—but when he attacked Clapton, Dylan and the Beatles, he went too fucking far.

—Electric,
Christopher, Illinois

BUMMER IN NEW JERSEY

This is concerning the new drug law passed in New Jersey on July 9th of this year. First of all, we the people weren't told, or even aware, of this change in the law taking place. Why aren't we given a vote on such issues?

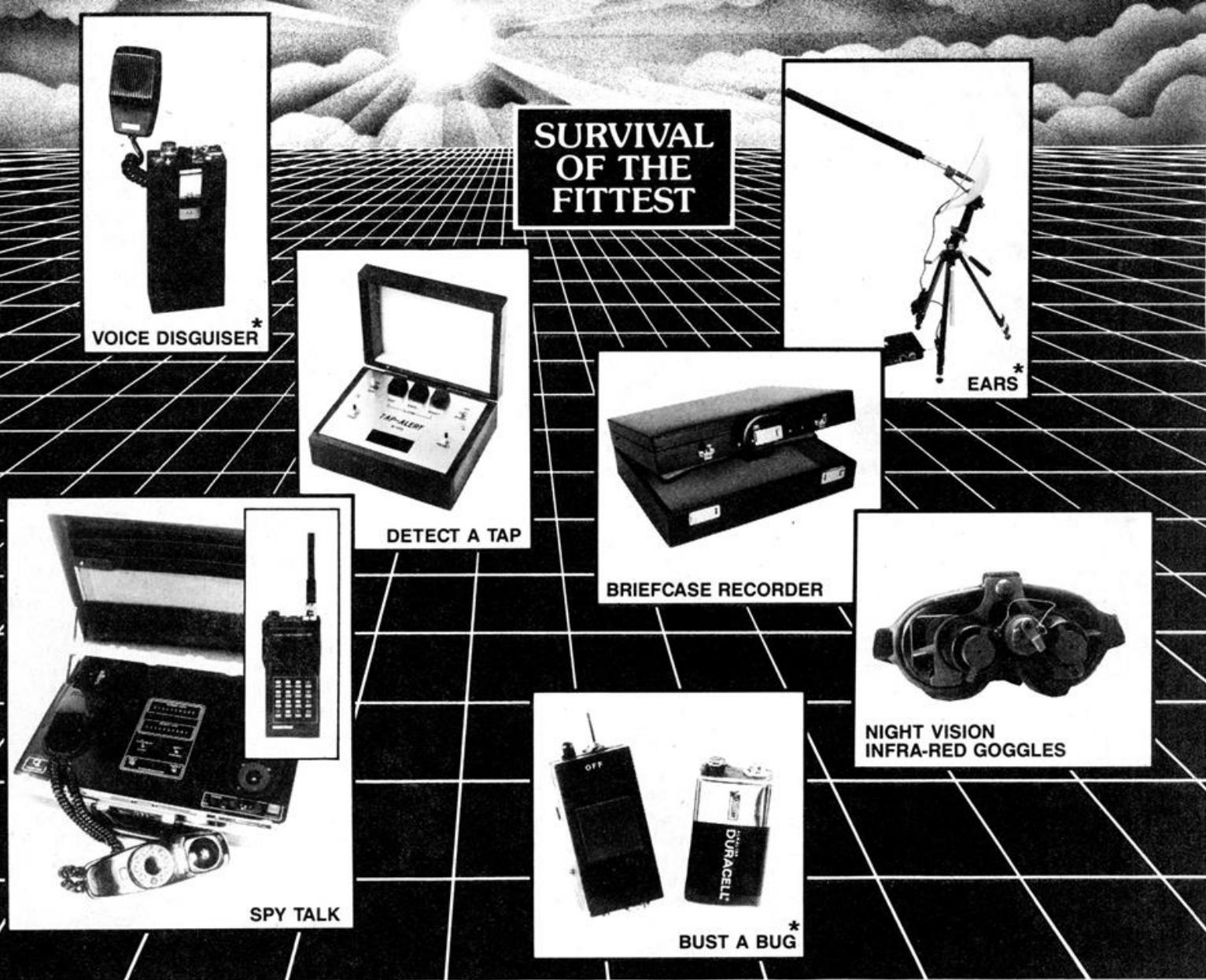
In this day and age, where our government is caught selling guns to Iran and making cocaine drug deals with Nicaragua, do you really think that the main concern of the people is whether or not someone smokes a marijuana cigarette? It really makes me wonder about the stability and sanity of the United States government. While I agree with them on the issues of heroin, coke, crack, PCP, angel dust, etc., I just

PHOTOTRON PHAN

Before Jeffrey DeMarco calls to give you guys hell, the Phototron II is not a hydroponic unit (NORML Convention, August 1987). It is fully explained in his telephone presentation and booklet, "The Garden."

Anyway, how about an article about Jeffrey DeMarco, his company, his criminology career, etc.? I know it would create a dilemma for you: How to do an article on him without giving him, in effect, pages and pages of free advertising. But is *HIGH TIMES* as optimistic about his view that marijuana will be legal by 1990?? These questions and many more could be answered by an article devoted to Mr. DeMarco.

—WHO wants to know?
Belding, Michigan ●



- Voice Disguiser: Works on any phone \$495.
- Detect-a-Tap \$495
- Spy talk encrypted scramblers and walkie talkies from \$1295
- Ears: long range microphones \$649
- Briefcase Recorder: Get it on tape \$424
- Night Vision Infra-Red Goggles: See in the dark from \$799
- Bust a Bug from \$349

* Actual item not shown

©COPYRIGHT 1987 ABWC

HIGH TECH STRATEGIES TO KEEP YOU CLEAN

Don't stay unprotected! Build a "fortress of security" with sophisticated equipment that can travel easily to provide security everywhere you go. Make an appointment to see full line of communications, surveillance and personal defense equipment. Also available: Lie Detection, Bullet-Proof Clothing and Eavesdropper Nullifiers.

So why wait . . . Order our equipment directly or send the coupon back with \$25, for our detailed catalog.

Anti-Bugging Anti-Wiretapping Corp. of America
630 Third Ave., New York, NY 10017

Money orders or credit cards only. Add \$4.50 for postage and handling.

Name _____

Address _____

Tel. _____ signature _____

Item(s) _____

Money order _____

Credit Card #, Exp. date _____

Prices effective for a limited time only

Anti-Bugging Anti-Wiretapping Corp. of America

630 Third Ave., New York, NY 10017 (212) 682-4731

1435 Brickell Ave., Miami, Fla. 33131 (305) 358-4336

9465 Wilshire Blvd., Beverly Hills, CA 90212 (213) 274-6256

5085 Westheimer Rd., Suite 3696, Houston, TX 77056 (713) 626-0007

Indoor Marijuana Horticulture



#1 Bestseller!

Autographed by the author

The book all indoor growers must have. It is the most complete, authoritative, up-to-date book on indoor marijuana cultivation ever! This 288 page edition is profusely illustrated with over 250 photographs, drawings and graphs. Packed full of information on grow rooms, grow lamps, electricity, container gardening, water, fertilizer, hydroponics, air, CO₂, bugs, fungi, cloning, harvesting, breeding and a garden calendar, index and glossary. \$14.95 + \$3 shipping = \$17.95

Interport, POBox 02009, Portland, OR 97202
TOLL FREE 1-800-547-9755 Ex.16
1-800-826-6134 Ex.16 in Oregon

NEW!

The COMBINED power of METAL HALIDE and HIGH PRESSURE SODIUM in ONE LAMP!



Before, you had to make a choice. Now you can have it all! A 400 watt HPS and a 400 MH lamp, together in one HORIZONTAL reflector. A light meter reads more than one 1000 watt vertical halide, but the light uses only 80% the power. The remote ballast is switch-selectable. You can turn on either or both lamps. \$319.00

GEOTECHNOLOGY

The high tech lighting company

303 Arden Ave.

Ben Lomond, CA 95005

(408) 336-2321 CA, (800) 346-2321 USA

Ask for our free catalog and we'll send a list of free technical literature.

CONTRA COKE

continued from page 44

According to investigators familiar with the case, Wanda Doe's most explosive testimony involved two sets of flights made from Baranquilla, Colombia to Miami, first in October 1983, then again in October 1985. Drugs were loaded onto planes in Baranquilla, and the planes were registered to Southern Air Transport. Southern Air was also involved in the C-123 that crashed in Nicaragua, having acted as middleman in its purchase, and having maintained the plane and others used in the resupply network on behalf of North's covert operation. Wanda Doe not only named Southern Air as the carrier, she also identified one of the dead pilots, Wallace Sawyer, as the man she saw in Baranquilla. It would be days before investigators in Managua would reveal that each of the pilots on board the C-123 bore Southern Air identification cards issued to them at Ilopango, and still more days before it was learned that flight records found on the wrecked plane confirmed that a Southern Air plane had indeed flown from Baranquilla on the days Wanda Doe mentioned. Still more time would pass before it was confirmed that Sawyer was the pilot on those flights.

Yet the grant of immunity stalled. It was not until the end of October, nearly a month after Wanda Doe had delivered her proffer, that she was given a lie-detector test. It was the 30th of that month before Justice Department officials in Miami agreed to meet with Laurel Marc-Charles and discuss having her client resume her role as an undercover informant. In part the delay may be connected to Attorney General Meese's then-secret order to suspend the Southern Air investigation. By the time the FBI would resume its probe of the airline, more than a month had passed since the downing of the C-123, the story of the Iran arms sale was front page news, and Wanda Doe was living in some kind of bureaucratic limbo. She was working again for the FBI, wired with recording devices and collecting information, still travelling back and forth from Miami to Washington, and still waiting for immunity. "We cut a deal with them," says Marc-Charles, referring to the Miami office. "We'd go back to work with them with the understanding that we'd go to full immunity once she became a witness." But it was not to be.

Starting in December, the lawyer recalls, she began to receive phone calls from reporters asking for information about her client. Up until then only a short article in the *Miami News* (in which, the lawyer says, she was able to

keep her client's name and gender out of the story) might have tipped off the investigation. Now reporters were calling day after day, citing "official" sources with significant bits of information that Marc-Charles says she determined sprang from leaks at the Justice Department. In January the *Wall Street Journal*, citing officials, said the witness would be speaking to the Walsh panel investigating the Iran-Contra scandal. Later that month *Newsday* reported that the witness was a woman, and a few days later the *Washington Times* gave her a name, "Wanda." "It [the *Times*] gave the witness' first name, said she was Hispanic, and named the drug dealer she was informing on," says a Congressional investigator involved with the case. "That's pretty targeted. It's like saying to that guy: 'Hey, there's this woman named Wanda out there that you've had some dealings with, and now she's singing on you.'"

The *Washington Times* stories quoted extensively from Justice Department memos and correspondence between the Department and Senator Kerry's office. The stories suggested that Senator Kerry's investigators had interfered with the FBI's agents, even that they induced "Wanda" to alter her story to implicate the Contras. The *Washington Times*, the newspaper that established its own fundraising foundation for the Contras after Congress cut off aid, seems an unlikely beneficiary of leaks from the Kerry staff. The conclusion, shared by Marc-Charles and Congressional investigators, is that Justice was leaking with the intent of ruining Wanda Doe as a witness. "She was willing to tell them everything, and they were very reluctant to listen," says one Congressional aid. "When I saw all the publicity coming out, I got very upset and began to check it out. The stuff was coming from Justice, in quantity. They had an agent in Miami talking to people and people in Washington talking to the press. They had all kinds of people prepared to talk about anything, when usually the procedure is to say 'no comment.'"

Since February, Wanda Doe has been living in hiding. According to her attorney she changes residences frequently, although she is still talking to Congress about testimony in the Southern Air case. Unfortunately, having been twice burned and thoroughly exposed, she is cautious about giving further details. Justice officials in Miami say Wanda Doe is no longer considered a potential witness at this time, and because she is not, is not entitled to protection. "They're waiting for my client to get blown away," says Marc-Charles, and perhaps for Washington to forget that there was once a witness ready to talk about the network. ●

continued from page 77

Dear Ed,

This is my first time growing. I started out with 70 seedlings and kept thinning them out until I was left with the six tallest, bushiest ones. They were three feet high at ten weeks. Then I put them into flowering and all six turned out to be male. What happened? Isn't that pretty incredible?

—*Trying Again,*
Nashville, Tennessee

The chances of that occurring naturally are about 1.56%, or about three out of 200. However, I think you selected for what you thought were female characteristics but were really male—a good reason to use clones or to sex early. One good way of sexing is to take a clipping of a side branch of a plant and put that into flowering. It can be done by keeping the cuttings in a jar with water under a 12-hour light/12-hour dark lighting regimen. Change the water daily. Make sure to mark each cutting. This way the plants' growth is not interrupted, but they are sexed.

Dear Ed,

I have been clipping the tops off my plants to make them branch out. I figure the more branches, the higher the total bud weight even though the individual buds may be smaller. Is this true?

Sincerely,
—*Troubled,*
Redding, California

It depends on the plant variety. Some varieties do produce a greater total weight when they branch out. Other varieties lose total weight. Usually varieties with a lot of natural branching increase total weight. This does not mean that clipping should be done or that anyone should overdo it. When plants branch they take more room, so that the actual weight per unit of space may remain the same. Severe or continual clipping will set back the plant.

● *I welcome comments, tips and questions regarding marijuana and marijuana cultivation. Send all letters to Ask Ed, HIGH TIMES, 211 E. 43rd St., New York, NY 10017. Also send entries for the Bud, Plant and Garden of the Month Contests. All correspondents whose letters or photos are used will receive a free copy of my book, Marijuana Growers Handbook, Indoor/Greenhouse Edition.*

● *By submitting your photograph(s), you hereby grant permission to publisher to reprint the photograph(s) in HIGH TIMES magazine as well as any other Trans-High Corporation publications.*

“THE SMOKER’S POUCH”

It's All Together. A Place for Everything and Everything in its Place

Bamboo Roller
& Rolling papers

2 extra multi-purpose pockets

Standard Size
Disposable Butane
Lighter

Velcro closure

Foldable
scissors

Tri-fold moisture proof
expandable Tobacco Pouch

5 in. stainless
steel hemostats



“The Smoker’s Pouch” is a strong, durable nylon carrying case with double stitched seams and a moisture proof lining designed to hold and keep your favorite tobacco fresh and readily available. Looks like a regular wallet or eyeglass case.

3 x 6 inches when folded closed, this pouch fits in your pocket. It comes with a 2 x 2 inch belt loop made of velcro so it may be worn personally or taken off and attached to any imaginable place you might want. Plus two extra multi-purpose pockets.

Colors come in black, red, green, or dark blue. Specify Color and Quantity

ONLY \$19.95

Send Check or Money Order to IDEAS-R-US:
P.O. Box 689, Seabrook, N.H. 03874

Name _____ State _____ Zip _____

Address _____ MasterCharge or Visa Account No. _____ Exp. Date _____

Signature _____

(Shipping included: add \$1.00 overseas. Allow 6-8 weeks delivery). Dealer Inquiries Welcome
If not completely satisfied return within 30 days after delivery. FULL MONEY BACK GUARANTEE

STIMULANTS, DIET AIDS AND MORE

Ephedrine Tablets (\$45/3000, \$20/1000, \$5/100): Maxi-White Thin or Thick, Maxi-Pink Heart, Maxi-Yellow.

Caffeine Tablets (\$60/3000, \$25/1000, \$6/100): Large Pink Heart, White w/Green Specks, 357 Magnums, White 20/20, Pink 20/20, Blue 30/30, White Cross.

Caffeine Capsules (\$90/3000, \$35/1000, \$8/100): Blue & Clear, Green & Clear, Small Black, Large Black, Small Yellow, Large Yellow.

Diet Aids: Grapefruit Diet (\$9.95/60), Super Night Diet (\$8.95/60), PPA Diet (\$7.95/100)



Sleep Aids: L-Tryptophane (\$8.45/60), Soma'pap (\$8.95/100)

FlashCaps™: Trial Packet (\$1.29), 30 Unit Bottle (\$9.95), 90 Unit Bottle (\$19.95)

Novelties: Adult Key Chains (\$7.95/Ea, \$29.95/12)

N.F. SUPPLY, INC.

1920 N. Vancouver • Portland, OR 97227

In Oregon (503) 282-8884

Toll Free 1-800-342-6555

- No Sales To Minors
- Offer Void where Prohibited By Law
- Personal Checks Held 20 Days For Clearing
- Use Only As Directed
- Prices & Inventory Subject To Change Without Notice

• Shipping Paid On All Prepaid Orders (Please Include \$2.50 Handling Fee On All Orders \$25.00 Or Less.)



Grow Wild Mushrooms Forever With The HOMESTEAD Mushroomkit

A decade ago, the Homestead Book Company introduced the first *Psilocybe Cubensis* Mushroomkit. Since then thousands of people have learned the joys of cultivating your own mushrooms.

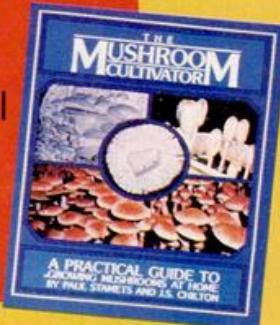
Each Homestead Mushroomkit includes a life time supply of fertile spores and two pounds of our rich high-yield compost. You also receive supplies, reusable tools, and ten pages of instructions from Bob Harris' book *Growing Wild Mushrooms*.

TOLL-FREE ORDER LINE
800-426-6777 CREDIT CARDS
ONLY. (except WA, AK, and HI).
All others please call
(206) 782-4532.



**HOMESTEAD BOOK
COMPANY**
Serving You Since 1972.

SECOND PRINTING.
THE MUSHROOM CULTIVATOR
by Stamets and Chilton. A virtual encyclopedia for serious mushroom growers, with over 400 pages of detailed information and photos.



- Deluxe *Psilocybe Cubensis* Mushroomkit \$50
- Spore Print... millions more \$25
- THE MUSHROOM CULTIVATOR** —Highly recommended \$25
- GROWING WILD MUSHROOMS** ...Simple guide \$6
- MAGIC MUSHROOM HANDBOOK** ...field guide \$11

Total Enclosed _____
VISA ____ MC ____ Expires _____
Card Number _____
Signature _____

Name _____
Address _____

Washington residents add sales tax. Foreign add 20% US Funds. Money Orders processed fastest. Sold in fine stores, too.

HOMESTEAD•

P.O. Box 31608 Seattle, Wa. 98103

(206) 782-4532

Dealer Inquiries Welcome



By Jim Poling

AL CAPONE (Columbia)

Not quite the real thing but closer than De Palma. A decent Rod Steiger and Fay Spain, but the atmosphere recalls "The Untouchables" television series rather than the Bogart-Raft movies it tries to emulate. But that's still not bad.

SWIMMING TO CAMBODIA (Cinemcom)

Spalding Gray on his bit part in **THE KILLING FIELDS**: "I said I knew nothing about politics. I didn't even vote. 'Perfect,' they said, 'you can play the American ambassador's aide.'" Condensed from Gray's award-winning stage monologue; he's a tireless and vivid storyteller.

RAISING ARIZONA (CBS/Fox)

White-trash comedy from the directors of **BLOOD SIMPLE**. Overrated, frantic and unfunny attempt to transform cartoon comedy into live-action.

ISHTAR (Columbia)

Elaine May's big one. Not worth the trouble for its few laughs. Pass it up in favor of May's **A NEW LEAF** (Paramount) in which she also stars as an inept moneybags. Great sight-gags in one of the best comedies of the '70s despite her claims to have disowned it.

ANGEL HEART (Vista)

Less a movie than a well-marketed publicity stunt built around the teasing notion that steamy footage had been edited out; that's ten seconds of Mickey Rourke's bum grinding away at miscast Lisa Bonet, and it's little surprise that this video version is making a big fat commotion over the "uncensored" restoration. Maybe there's still missing footage to explain why every other shot is of a ceiling fan. Robert De Niro stars briefly. Alan Parker is responsible for directing.

SECRET CEREMONY (Kartes)

Elizabeth Taylor, Robert Mitchum and Mia Farrow form a sick little triangle in a secluded mansion. A brilliant psychodrama and one of the most unsavory and grim films to feature such a respectable cast. Frequently shown on television minus nearly 30 minutes with newly shot footage of two nameless actors who tell the story in flashback eliminating the lesbian and incest angles. Rent the tape.

GEORGIA, GEORGIA (Kartes)

Like Dorothy Dandridge, **GEORGIA** star Diana Sands was one of the most talented black actresses working in Hollywood, and like Dandridge, Diana Sands died very young. This virtually unknown film received scant play when released (1972), and its video rescue from complete oblivion is welcome. Sands plays a rock star whose modern ideals are challenged by her more traditional black companion/surrogate mother whose desire for salvation in Sands' life leads to a climax that is unexpected, horrifying and absolute.

GOTHIC (Vestron)

Did you know that liquid opium inspired Mary Shelley to write *Frankenstein*? Ken Russell says so. Eyes for nipples, dead babies, comas and a lot of ranting and mincing. Brutally dull.

THE WITCHES OF EASTWICK (Warner)

Miserable Yuppie hit and more vomit than any summer film. Neither Jack Nicholson nor Cher command attention. Saving grace: Michelle Pfeiffer—too beautiful to waste.

THE UNTOUCHABLES (Paramount)

Kevin Costner makes no impression in the lead. Endless, overblown and pretentious. Will someone please stop financing Brian De Palma movies? And what's the story with that disco score?

THE THRILL KILLERS (Camp)

Director Ray Dennis Steckler's name usually turns up with the negligible likes of Edward Wood, Herschell Gordon Lewis and Jesse Franco, but Steckler happens to have talent. This is probably his best—a film equivalent to the *Weekly World News* in that it's seedy, a little shrill and unpleasant. Made in 1964, it's black-and-white, and, might I add, sharp photography lends a nice pulpiness to the story of a desert community troubled by escaped mental patients. Liz Renay, who stumbles nicely in her tight skirt that conceals the blade of an axe, was later rediscovered by John Waters in **DESPERATE LIVING**. If you happen to be on a Steckler kick, and gee, why shouldn't you be, look up his infamous monster musical, **THE INCREDIBLY STRANGE CREATURES WHO STOPPED LIVING AND BECAME MIXED-UP ZOMBIES** (Camp), and **THE HOLLYWOOD STRANGLER MEETS THE SKIDROW SLASHER** (Hollywood), Steckler's nerviest movie with its post-dubbed narration (there is no dialogue). It takes a good deal of patience. And finally, Steckler's atypical **WILD GUITAR** (Rhino), a teenage romance about a young rock 'n' roll star and go-go dancer longing for fame after their appearance on a cheesy local TV variety show. Simpleminded but sincere.

TOUGH GUYS DON'T DANCE (Cannon)

Norman Mailer adapts and directs his own novel. Isabella Rossellini seems embarrassed by the incompetence of it all. Ryan O'Neal does not. Watch for a fast theater playoff and an even faster video release.

THE PRESIDENT'S ANALYST (Paramount)

James Coburn in the title role and his knowledge of White House secrets puts a CIA goon squad on his tail. Nice beginning and clever ending with a terrific bit by William Daniels as a New Jersey "liberal" ("Hey, I love the Negroes") who offers his home to Coburn as cover.

THE WASP WOMAN (Sinister Cinema)

Poor Susan Cabot; bludgeoned to death by her deranged midget son last year. A good B actress (see her **CARNIVAL ROCK** on Admit One) Cabot was especially endearing in her horror films. Here she plays a lovely executive in a cosmetics firm whose nasty beauty secret forces her to buzz around at night stinging people to death in a foam rubber wasp head.

silver walks

shit and decides to kick, so she goes to South America or somewhere and pays 'em a few mil to clean her act up for her."

"She can't be on shit."

The bartender looked at her. "Whatever."

"But how come she'd even start doing anything? I mean, she's Angie, right?"

"Goes with the territory."

"But look at her," she protested, "she looks so good..." But Angie was gone, replaced by a black tennis player.

"You think that's her? That's a talking head."

"Head?"

"Like a puppet," a voice behind her said, and she swung around far enough to see a ruff of sandy hair and a loose white grin. "Puppet," and held up his hand, wiggling thumb and fingers, "you know?"

She felt the bartender drop the exchange, moving off down the bar. The white grin widened. "So she doesn't have to do all the stuff herself, right?"

She smiled back. Cute one, smart gray eyes and a secret halo flashing her just the signal she wanted to read. No suit trick. Kinda skinny, she could like that tonight, and the loose look of fun around his mouth set strange against the bright smart eyes.

"Michael."

"Huh?"

"My name. Michael."

"Oh. Mona. I'm Mona."

"Where you from, Mona?"

"Florida."

And wouldn't Lanette just tell her go for it?

★ ★ ★

Eddy hated art crowd people;

they weren't buying what he was selling. He'd have hated Michael more, because Michael had a job and this loft in a co-op building. Or anyway he said it was a loft, but when they got there it was smaller than Angie thought a loft was supposed to be. The building was old, a factory or something; some of the walls were sandblasted brick and the ceilings were wood and timbers. But all of it had been chopped up into places like Michael's, a room not much bigger than the one back at the hotel, with a sleeping-space off one side and kitchen and bath off the other. It was on the top floor, though, so the ceiling was mostly skylight; maybe that made it a loft. There was horizontal red paper shade below

the skylight, hooked up to strings and pulleys, like a big kite. The place was kind of messy but the stuff that was scattered around was all new: some skinny white wire chairs strung with loops of clear plastic to sit on, a stack of entertainment modules, a work station, and a silver leather couch.

They started out on the couch but she didn't like the way her skin stuck to it, so they moved over to the bed, back in its alcove.

That was when she saw the recording gear, stim stuff, on white shelves on the wall. But the wiz had kicked in again and anyway, if you've decided to go for it, you might as well. He got her into the pick-up, a black rubber collar with trode-tipped fingers pressing the base of her skull. Wireless; she knew that was expensive.

While he was getting his own set on and checking the gear on the walls, he talked about his job, how he worked for a company in Memphis that thought up new names for companies. Right now he was trying to think of one for a company called Cathode Cathay. They need it bad, he said, and laughed, but then he said it wasn't easy. Because there were so many companies already that the good names had been used up. He had a computer that knew all the names of all the companies, and another one that made up words you could use for names, and another one that checked if the made-up words meant dickhead or something in Chinese or Swedish. But the company he worked for didn't just sell names, they sold what he called image, so he had to work with a bunch of other people to make sure the name he came up with fit the rest of the package.

Then he got into bed with her and it wasn't really great, like the fun was gone and she might as well have been a trick, how she just lay there thinking he was recording it all so he could play it back when he wanted, and how many others did he have in there anyway?

So she lay there beside him, afterward, listening to him breathe, until the wiz started turning tight little circles down on the floor of her skull, flipping her the same sequence of unconnected images over and over: the plastic bag she'd kept her things in down in Florida, with its twist of wire to keep the bugs out—the old man sitting at the chipboard table, peeling a potato with a butcher knife worn down to a nub about as long as her thumb—a krill place in Cleveland that was shaped like a shrimp or something, the plates of its arched back bent from sheet metal and clear plastic, painted pink and orange—the preacher she'd seen when she'd gone to get

her new clothes, him and his pale fuzzy Jesus. Each time the preacher came around, he was about to say something, but he never did. She knew it wouldn't stop unless she got up and got her mind onto something else. She crawled off the bed and stood there looking at him in the gray glow from the skylight. *Rapture. Rapture's coming.*

So she went out into the room and pulled her dress on because she was cold. She sat on the silver couch. The red shade turned the gray of the skylight pink, as it got lighter outside. She wondered what a place like this cost.

Now that she couldn't see him, she had trouble remembering what he looked like. Well, she thought, he won't have any trouble remembering me, but thinking that made her feel hit or hurt or jerked around, like she wished she'd stayed at the hotel and stymied Angie.

The gray-pink light was filling up the room, pooling, starting to curdle at the edges. Something about it reminded her of Lanette and the stories that she'd o.d.'d. Sometimes people o.d.'d in other people's places, and the easiest thing was just toss them out the window, so the cops couldn't tell where they came from.

But she wasn't going to think about that, so she went into the kitchen and looked through the fridge and the cabinets. There was a bag of coffee beans in the freezer, but coffee gave you the shakes on wiz. There were a lot of little foil packets with Japanese labels, freeze-dried stuff. She found a package of teabags and tore the seal from one of the bottles of water in the fridge. She put some of the water in a pan and fiddled with the cooker until she got it to heat up. The elements were white circles printed on the black countertop; you put the pan in the center of a circle and touched a red dot printed beside it. When the water was hot, she tossed one of the teabags in and moved the pan off the element.

She leaned over the pan, inhaling herb-scented steam.

She never forgot how Eddy looked, when he wasn't around. Maybe he wasn't much, but whatever he was, he was there. You have to have one face around that doesn't change. But thinking about Eddy now maybe wasn't such a good idea either. Pretty soon the crash would come on, and before then she'd have to figure out a way to get back to the hotel, and suddenly it seemed like everything was too complicated, too many things to do, angles to figure, and that was the

crash, when you had to start worrying about putting the day side together again.

She didn't think Prior was going to let Eddy hit her, though, because whatever he wanted had something to do with her looks. She turned around to get a cup.

Prior was there in a black coat. She heard her throat make a weird little noise all by itself.

She'd seen things before, crashing on wiz; if you looked at them hard enough, they went away. She tried it on Prior but it didn't work.

He just stood there, with a kind of plastic gun in his hand, not pointing it at her, just holding it. He was wearing gloves like the ones Gerald had worn for the examination. He didn't look mad but for once he wasn't smiling. And for a long time he didn't say anything at all, and Mona didn't either.

"Who's here?" Like you'd ask at a party.

"Michael."

"Where?"

She pointed toward the sleeping-space.

"Get your shoes."

She walked past him, out of the kitchen, bending automatically to hook her underwear up from the carpet. Her shoes were by the couch.

He followed and watched her put her shoes on. He still had the gun in his hand. With his other hand, he took Michael's leather jacket from the back of the couch and tossed it to her. "Put it on," he said. She did, and tucked the underwear into one of its pockets.

He picked up the torn white raincoat, wadded it into a ball, and put it into his coat pocket.

Michael was snoring. Maybe he'd wake up soon and play it all back. With the gear he had, he didn't really need anybody there.

In the corridor, she watched Prior relock the door with a gray box. The gun was gone, but she hadn't seen him put it away. The box had a length of red flex sticking out of it with an ordinary-looking magnetic key on the end.

Out in the street was cold. He took her down the block and opened the door of a little white three-wheeler. She got in. He got in the driver's side and peeled the gloves off. He started the car; she watched a blowing cloud reflected in the copper-mirrored side of a business tower.

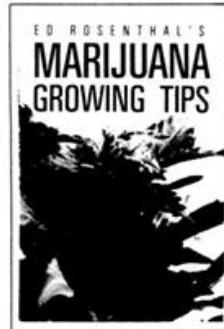
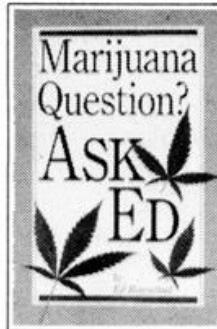
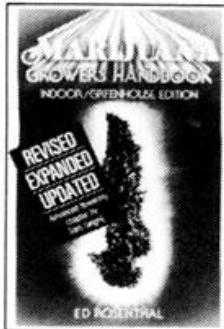
"He'll think I stole it," she said, looking down at the jacket.

Then the wiz flashed a final card, ragged cascade of neurons across her synapses: Cleveland in the rain and a good feeling she had once, walking.

Silver. ●

BY WILLIAM GIBSON
Copyright 1987 by William Gibson
Excerpt from *Mona Lisa Overdrive*, to be published
1988 by Bantam Books

THREE NEW BOOKS BY ED ROSENTHAL



Marijuana Growers Handbook REVISED - Indoor/Greenhouse edition

Quick American Publishing

#ISBN 0-932551-00-9

252 pages, 5½ x 8½. Photographs, illustrations, Index, Catalog.

Bibliography, Scientific Appendix

It includes the latest, most detailed research done on this subject to this date. Chapters on growing methods, planting mixes, hydroponics, watering, manicuring, sexing, lights, CO₂, nutrients, pests, genetics, cloning, pruning, and much more. Two new chapters are included in the revised edition—Growing in the Ground, and Advanced Flowering. The Advanced Flowering chapter includes a scientific summary of the flowering characteristics of virtually all varieties of cannabis, as well as providing information on the means to manipulate the flowering cycles. Reference maps, lighting charts, photoperiod graphs and seed characteristic tables are included here that have never before been seen anywhere in the literature. The information in this book is absolutely revolutionary!

\$19.95
spiral bound

Marijuana Question? Ask Ed

Quick American Publishing

275 pages, 5½ x 8½.

Photographs, index, charts, diagrams.

\$19.95
spiral-bound

The new book from Ed was inspired by his popular, long-running "Ask Ed" column in High Times. Each answer has been revised and updated to include the latest available horticultural information on the topic. A virtual encyclopedia of marijuana information, each question and answer has been thoroughly referenced so that a quick review of the Table of Contents or the Index provides information required to answer every conceivable marijuana question ever asked in Ed's column. Chapters on: cultivation practices, varieties, genetics, pests, curing, CO₂, smoking, eating, the legal aspects of cultivation, and much more. Loaded with photos, charts, diagrams, and a comprehensive index.

Marijuana Growing Tips

Ronin Press

125 Pages, 5½ x 8½.

Photos, illustrations.

\$15.95
spiral-bound

Contains articles originally published in High Times which Ed rewrote especially for this book. This volume has many facets: it's a cultivation book with specific growing information for indoor and outdoor gardeners (chapters on soils, lights, CO₂, cuttings, choosing seeds). It's also a travel book, describing cultivation and curing techniques practiced all over the world, including Morocco and India. And it contains the most complete interview ever given by Dr. Carlton Turner who is currently Drug Policy Advisor for the Reagan Administration but who ran the government-sponsored pot farm at the University of Mississippi in 1981. This interview contains important information about cultivation, THC chemistry, and government policies regarding marijuana.

Also Available From Quick Trading

Marijuana Grower's Guide by Mel Frank & Ed Rosenthal

And/Or Press

350 pages, 5½ x 8½

#ISBN 0-915904-26-8

Marijuana Grower's Guide is the most comprehensive guide to growing ever published. Sections on indoor cultivation, breeding, grafting, sinsemilla, drying, curing, cannabis botany and chemistry tell you everything you need to know to grow primo plants indoors and out. Detailed instructions for supplying and curing a constant flow of superior quality product. If you grow, you need this book. A dramatic 16 page color section, and over 150 black and white photos are included.

\$19.95
spiral bound

Marijuana Botany by Robert Connell Clark

And/Or Press

220 pages, 7½ x 9½. Illustrations, Glossary, Index

#ISBN 0-915904-45-4

Marijuana Botany contains data on all phases of cannabis cultivation: structure and characteristics of the plant, how quality is affected by climate and environment, plant propagation, identification and desirability of male plants, harvesting, THC production and peak potency, using seeds of unknown strain, developing your own strains.

\$12.95

Indoor Marijuana Horticulture by Jorge Cervantes

Interport U.S.A. Inc.

288 pages, 5½ x 8½

#ISBN 0-932331-01-7

Indoor Marijuana Horticulture is a complete up-to-date book on indoor marijuana cultivation. It is a step-by-step guide to the grow room, metal halide and high pressure sodium lamps, container gardening, cloning, CO₂ enrichment. Case studies are included: a look at three successful growers. Illustrations & photos.

\$14.95

The Sinsemilla Technique by Kayo

Last Gasp Publications

133 pages, 7 x 10. Photographs, Illustrations, Index

#ISBN 0-86719-303-4

Presents inside information from cultivators and law enforcement agents alike. Included are how high potency marijuana strains are manipulated to improve quality and how cutting productivity, and propagation techniques are used to improve yield, use of microclimate gardening to improve quality, use of different soil, nutrient and water systems, camouflage, habitats and techniques of marijuana eradication teams, harvesting, manicuring and marketing.

\$14.95

The Cultivator's Handbook of Marijuana

by Bill Drake

And/Or Books

233 pages, 7 x 9

#ISBN 0-914171-44-X

Bill Drake's classic bestselling Cultivator's Handbook is totally revised and expanded, containing information on the art and process of growing the finest marijuana for both the outdoor and indoor cultivation of psychoactive tobacco. Over 100 photographs, drawings, charts and maps.

\$14.95

SEND ORDER TODAY!

Send Check or Money Order To: **QUICK TRADING CO. • P.O. Box 477 • San Francisco, CA 94101**

All products are sent to you in a plain brown mailer. Our mailing list is completely confidential. Canadian and other foreign orders: funds must be in U.S. dollars. There are additional shipping charges to foreign countries, so to avoid delay, write first to inquire about air mail or expedited delivery. As a standard policy, we ship in the U.S. via United Parcel Service. We must have a full street address for UPS delivery. If you cannot provide a full street address, or UPS does not deliver to your area, add an additional \$2.00 for first class mail. Sorry, but no CODs. For quickest service, send a money order or use your credit card, since orders paid by personal check are held up to 4 weeks for bank clearance. Send \$1.00 for catalog, refundable with first order.

BILL my MasterCard/Visa (\$20 credit) EXPIRATION DATE _____

CARD # _____

Signature _____

PLEASE SEND ME:

____ COPIES	MARIJUANA GROWERS HANDBOOK	\$ _____
____ COPIES	MARIJUANA QUESTION? ASK ED	\$ _____
____ COPIES	MARIJUANA GROWING TIPS	\$ _____
____ COPIES	MARIJUANA GROWER'S GUIDE	\$ _____
____ COPIES	MARIJUANA BOTANY	\$ _____
____ COPIES	INDOOR MARIJUANA HORTICULTURE	\$ _____
____ COPIES	THE SINSEMILLA TECHNIQUE	\$ _____
____ COPIES	THE CULTIVATOR'S HANDBOOK	\$ _____

Handling & UPS Shipping \$ 4.00

First Class Mail: Add \$2.00, optional if you can't provide street address

6% California Sales Tax if applicable

TOTAL \$ _____

SIGNATURE REQUIRED ON ALL ORDERS

I am 18 years of age or older and I am ordering these books for my own use

SIGNATURE _____

NAME _____

ADDRESS NO PO BOXES FOR UPS

CITY/STATE/ZIP _____

I am enclosing:

Check
 Money Order

CHARGE BY PHONE: Call toll-free nationwide in California call 800-428-7824, ext. 102. Outside California call 800-428-7825, ext. 102. **\$20 CREDIT CARD MINIMUM, MASTERCARD AND VISA ONLY**



WHOLESALE INQUIRIES INVITED

VISA

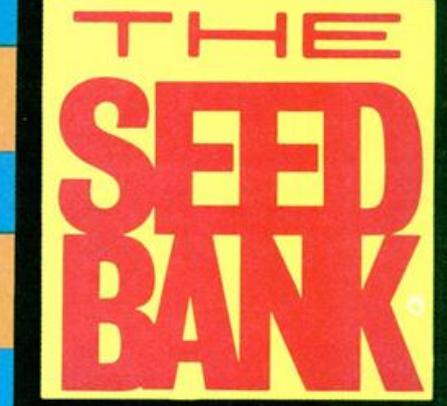
DIRECT

FROM

HOLLAND



We have some of the most potent and resinous varieties in the world, including **NORTHERN LIGHTS**, **BIG BUD**, and **SKUNK#1**. Also, we now have super quality **RUDERALIS** hybrids, proven to be the earliest varieties known to mankind. Every grower can benefit from our collection.



CATALOG

• SEND YOUR NAME AND
ADDRESS FOR OUR NEW

FREE

COLOR CATALOG, PRICE
AND INFORMATION
LIST TO:

THE SEED BANK
POSTBUS 5
6576ZA, Ooy (Gem. Ubb.)
THE NETHERLANDS



SUPPLIER OF PREMIUM
QUALITY CANNABIS SEEDS

They said it couldn't be done,



But Paradise Hydroponics Did It Just For You! Take A Good Look . . .

ITEMS SHOWN

TEN DELUXE FEATURES AT NO EXTRA CHARGE

- 2 Arm Sun Circle \$189.00
- 1000 Watt Halide 199.00
- 1000 Watt H.P.S. 267.00
- 8 Unit Hydroponic 293.00
- CO₂ Enrichment 139.00
- Dyna Grow or Bloom 1 Qt. 7.95

**HOT! How to Video \$39.95
40 min.**



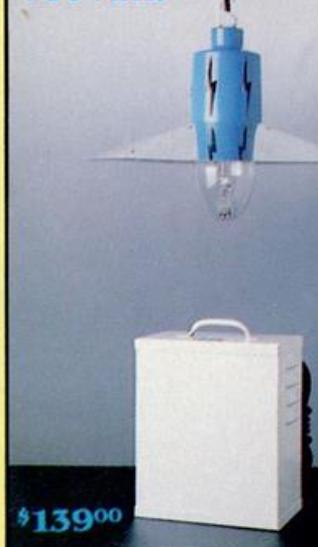
Setting Up Your Indoor Grow Room

- ✓ Factory Installed Installation Hook
- ✓ Color Coded Fixture Housing
- ✓ Lightning Bolt Cut-outs For Maximum Cooling
- ✓ 100% Full Reflective Hood Made of Highly Polished Aluminum Alloy
- ✓ High Out-put Lamp
- ✓ 24 Ft. of 105° Rated 16/3 Cable
- ✓ Securely Mounted Easy Grip Handle
- ✓ Durable White Electro Coat Finish
- ✓ Dyna Flow Louver Placement to Maintain a Cooler Operating Temperature
- ✓ High Quality Multitap Ballast

**Absolutely the Finest
Stock on Hand!**

★ ORDER NOW ★

400 M.H.



Call or Write
For Your FREE
Color Catalog

TOLL FREE (800) 332-GROW
IN CALIFORNIA (707) 445-5720

PARADISE HYDROPOONICS
306 West Harris
Eureka, CA 95501



FAST DELIVERY
REMEMBER: If We Don't Have It, You Don't Need It!

continued from page 68

SUMMARY:

Enough is known about the effects of marijuana to keep most researchers from saying that the heavy, chronic smoker will get a completely free ride. There have been demonstrable negative effects to the lungs and unanswered questions regarding several other bodily functions. It's questionable whether these represent a serious danger to the user: The answer you get depends on the researcher you speak with. At this time, the adverse effects appear fully reversible through abstinence, though a good deal more research is hoped for in several areas to clarify the issue.

Information in this report was compiled primarily through the use of several research review/overview reports. Specific bibliographical requests will be furnished on request. Address queries to **Peter Gorman, c/o HIGH TIMES, 211 E. 43rd St., New York, NY 10017.**

MARIJUANA RESEARCH/OVERVIEW REPORTS:

Dewey, Wm. L., "Cannabinoid Pharmacology," **Pharmacological Reviews**, Vol. 38, #2.

Hollister, Leo, "Health Aspects of Cannabis," **Pharmacological Reviews**, Vol. 38, #1.

Jones, Helen C. and Paul Lovinger, **The Marijuana Question**, Dodd, Mead, 1986.

Latimer, Dean, "The Complete Cannabis," **HIGH TIMES**, Feb. 1985.

National Institute of Drug Abuse, various reports furnished by the U.S. government.

Smith, David, M.D. and Rick Seymour, M.A., "Abuse Folio: Marijuana," a look at the nature, use and hazards of grass; **HIGH TIMES**, October, 1982.

United States Congressional Subcommittee Hearings, "Health Consequences of Marijuana," 1980.

United States Department of Health and Human Services, **HHS NEWS**, May 5, 1987.

United States Secretary of Health and Human Services/National Institute of Medicine, **Marijuana and Health**, "The Relman Report," a study of all known marijuana research conducted between 1965 and 1980; National Academy Press, 1982.

Wert, Renee, Ph.D. and M. Raulin, Ph.D., "The Chronic Cerebral Effects of Cannabis Use: Neurological Findings," **International Journal of Addictions**, Vol. 21, #6, pp. 605-628.

World Health Organization, reports acquired from the United Nations.

Zinberg, Norman, **Drugs, Set and Setting**, Yale Press, 1984. ●



STIMULANTS



#1-4
package of
100: \$ 9.95
1,000: \$35.00



#5-9
package of
25: \$ 5.95
100: \$12.95
1,000: \$45.00



#10-15
package of
25: \$ 6.95
100: \$14.95
1,000: \$55.00

Product Number
SIZES
25
100
1,000
Quantity
Free Catalog

Guaranteed Same day shipping

M. A. PHARMACEUTICAL CO.
1618 N.E. 6th Ave. • Portland, OR 97232
For C.O.D. Call Toll Free: 1-800-547-7004

free shipping on all
pre-paid orders

Name _____
Address _____
City _____ State _____ Zip _____
Telephone _____

Total Amount Enclosed \$ _____

CAUTION: Persons under medical care should consult their physicians before taking any medication. Use only as directed. Products not intended for repackaging or resale without State license. All products contain ephedrine sulfate or caffeine. NOTE: Products 1-4 are classified as bronchodilators.

WHY BUY FROM US?

NEW PRODUCT ANNOUNCEMENT THE FLYING M LIGHTING SYSTEMS

The Facts Speak for Themselves

Fact: 3 feet under a typical 4 foot round reflector hanging a metal halide lamp vertically, a GE light meter reads 1400 foot-candles.

Fact: With our standard **HORIZONTAL REFLECTOR**, that reading jumps to 2000 foot-candles — **A 42% IMPROVEMENT**.

Fact: With the **NEW FLYING M REFLECTOR** that reading improves to 2400 foot-candles — **A 72% IMPROVEMENT!**

Fact: All readings are **EVEN HIGHER** using the high pressure sodium lamp.

Fact: Horizontal reflectors take up **LESS ROOM OVERHEAD**. They can be **MOUNTED IN CORNERS**.

They can be used for **SIDE LIGHTING**.



THE FLYING M HORIZONTAL REFLECTOR



Low noise ballast, using
ISO DAMP to KEEP IT QUIET.

	Standard 1000w	FLYING M	400 watt
HALIDE SYSTEM	\$198	\$259	\$138
HP SODIUM	264	310	198

PRODUCTS: • HID LAMPS • NUTRIENTS
• LIGHT MOVERS • NEGATIVE ION GENERATORS
• ROCKWOOL • BOOKS
• HYDROPONICS • FREE TECHNICAL
• CO₂ SYSTEMS INFORMATION

Make **EFFICIENT USE** of all that power you are using. **BUY** the Standard or the **FLYING M HORIZONTAL LIGHTING SYSTEM**. You **CAN'T LOSE** with our **MONEY BACK** guarantee.

GEOTECHNOLOGY

The "high tech" lighting company
303 ARDEN AVE, BEN LOMOND, CA 95005

TOLL FREE Outside of California (800) 346-2321
Within California call (408) 336-2321

12 years in business manufacturing HID lighting systems.

Write NOW for a FREE catalog, and
we will include a list of FREE
TECHNICAL PUBLICATIONS.



ONE YEAR PARTS & LABOR GUARANTEE —
30 DAY MONEY BACK GUARANTEE — MOST
ORDERS SHIPPED IN 24 HOURS — C.O.D.
ORDERS WELCOME — NO DEPOSIT REQUIRED
— QUANTITY PRICES AVAILABLE

STIMULANTS!

STIMULANTS

		Price Per Bottle		
		1000	100	
20. D&E 127™	250mg	\$30.00	\$6.50	
21. Mole	325mg	30.00	6.50	
22. 357 Magnum	357mg	35.00	7.50	
23. 20/20	300mg	30.00	6.50	
24. D&E 250™	250mg	25.00	6.50	
25. D&E 225™	225mg	23.00	6.50	
26. D&E 85/25™	110mg	18.00	5.00	
27. D&E 190™	175mg	30.00	7.50	
28. D&E 290™	325mg	35.00	7.50	
29. D&E 260™	225mg	28.00	6.50	
30. D&E 160™	175mg	25.00	6.50	
31. D&E 500™	350mg	35.00	6.50	
32. 30/30	300mg	30.00	6.50	
33. D&E 200™	200mg	23.00	6.50	
34. D&E 25/25™	110mg	15.00	5.00	

Active Ingredient in above stimulants: Caffeine

CAUTION: Individuals under medical care should consult their physician.



35. **D&E 25™ Bronchodilator:** Ephedrine 25 mg.

For use in treatment of Asthma symptoms.

1000 Tablets - \$18.00

100 Tablets - \$7.50

36. **On-The-Go™ Natural Stimulant:** Guarana in a special blend for pep and energy the natural way.

90 Tablets - \$9.98

DIET AIDS

37. **Weight-No-More™:** (3-A-Day) A special formula that curbs your appetite through the meal while reducing dieting fatigue. 1000 Capsules - \$30.00

100 Capsules - \$7.50

38. **Diet Time™:** (1-A-Day) Only one capsule needed to continuously control appetite throughout the day.

90 Day Supply - \$9.95

39. **The Milford Plan™:** Dieting Breakthrough! Two products that control your appetite and revitalize the essential needs of the body. Lose weight and maintain healthy nutrition.

90 Day Supply \$19.95

CALL TOLL FREE: 1-800-221-1833

IN NEW JERSEY CALL (201) 838-5254

3-Easy Ways to Order:

1. **Charge It — Use Visa or MasterCard.**  
2. **C.O.D. — We ship today and you pay on delivery.**
3. **Send Payment in Full — Add \$3.50 for Shipping and Handling.**

(N.J. Residents add 6% Sales Tax - No Personal Checks, Please)

D&E PHARMACEUTICALS, INC. - 206 Macopin Road, Bloomingdale, N.J. 07403

Specials

SAVE! - Order any 10 Bottles of 100 Tablets or Capsules of stimulants for only **\$45.00**

EXTRA DISCOUNT!

10% Off all orders for **On-The-Go** Natural Stimulant tablets.

Switching to High Pressure Sodium has never been easier. Or cheaper.

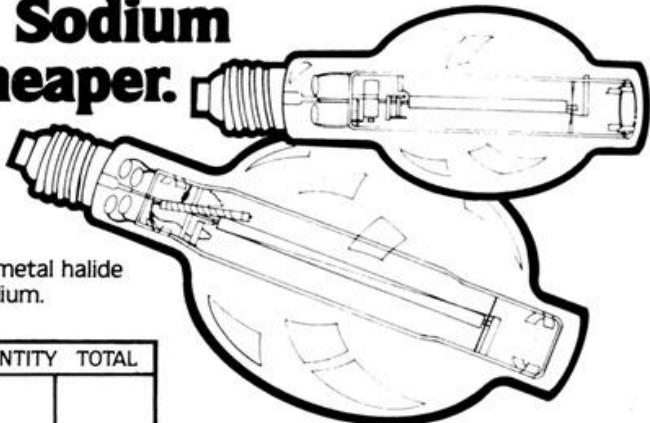
You asked for it. You got it. Energy Savers is pleased to announce high pressure sodium bulbs specifically designed for metal halide lighting systems.

Easier.

When your plants are ready to bud and flower, simply change the light bulb.

Cheaper.

Now, you don't have to invest in a whole new lighting system just to switch from metal halide to high pressure sodium.



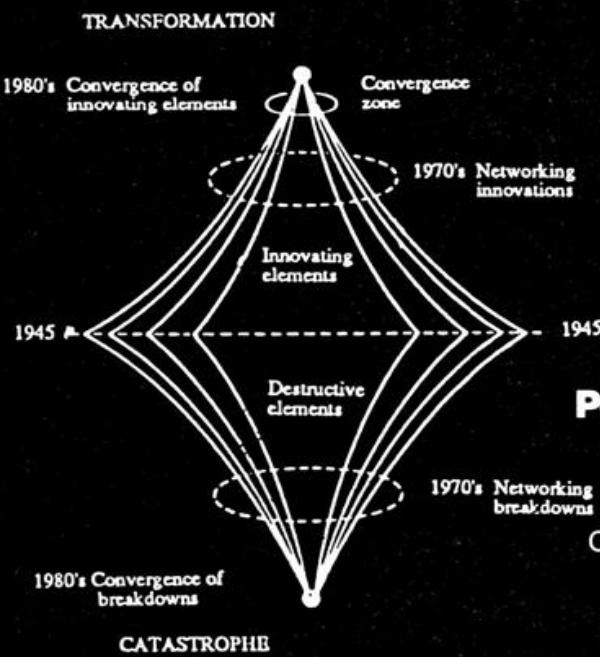
		LUMENS	PRICE	QUANTITY	TOTAL
	1000 WATT CONVERSION BULB	USES ONLY 940 WATTS— HAS ONE YEAR WARRANTY	140,000	\$139.00	
	400 WATT CONVERSION BULB	USES ONLY 360 WATTS— HAS ONE YEAR WARRANTY	50,000	\$69.00	
	GIANT 1500 PAGE CATALOG FEATURING BLOWERS, FANS, PUMPS, MOTORS AND 15,000 OTHER ITEMS		\$ 5.00 (Refunded with first purchase from catalog.)		
				SUBTOTAL	
				CA RESIDENTS ADD 6.5% TAX	
				C.O.D. CHARGE (\$2.00)	
				SHIPPING AND HANDLING	\$ 3.00
				TOTAL	
See our other fine products on the inside front cover ad.					
CALL TOLL FREE OR MAIL IN YOUR ORDER		OUTSIDE CALIF	ACCOUNT NUMBER		
(800) 421-2994 (800) 538-3400		INSIDE CALIF	INTERBANK NO. <input type="text"/> MASTERCARD ONLY (THE NUMBER OVER YOUR NAME)		
			EXP. DATE	MO.	<input type="text"/> YR <input type="text"/>
SIGNATURE FOR CHARGE ORDERS					

The latest technology has created a unique, energy-saving sodium bulb that runs off of your existing metal halide ballast. Using less electricity and having a life expectancy of 24,000 hours, you can realize enough savings in energy, in just one year, to virtually pay for the bulb itself.

Order your own high pressure sodium bulb for your existing metal halide system today. And make the switch to sodium lighting without making the investment. Works with mercury vapor ballasts, too!

ESUTM **ENERGY SAVERS UNLIMITED, INC.**
 22138 S. VERNONT AVE. #C
TORRANCE, CALIFORNIA 90502

COMING IN DECEMBER! A FREE GIANT PULLOUT CALENDAR

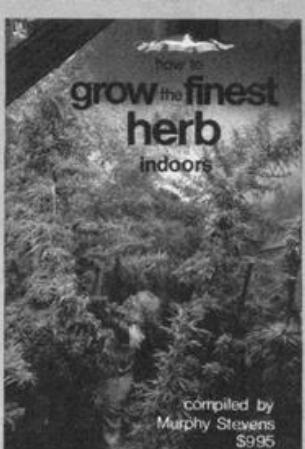


Peter Gorman gets harmonically converged at the **Tule Tree** near Oaxaca, Mexico • **Carlo McCormick** curates an expanded **High Art** in conjunction with the Summer of Love celebration in **San Francisco** • A grower from Maine crosses **indica** with Colombian and develops an awesome strain of **creeper pot** • PLUS, the **Readers' Harvest Report** •

Indoor/Outdoor Highest Quality
MARIJUANA
GROWER'S GUIDE

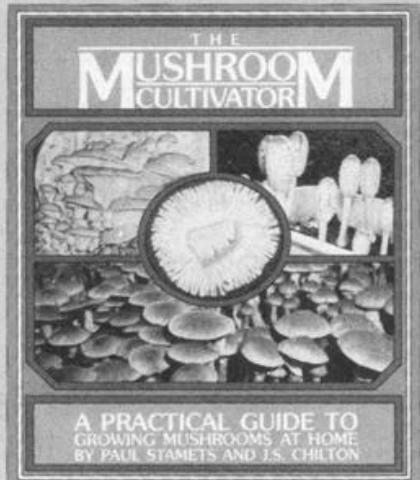


by
Mel Frank & Ed Rosenthal

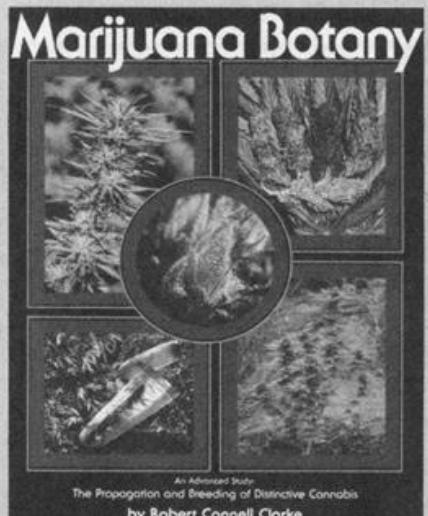


compiled by
Murphy Stevens
\$9.95

the HIGH TIMES



A PRACTICAL GUIDE TO
GROWING MUSHROOMS AT HOME
BY PAUL STAMETS AND J.S. CHILTON



An Advanced Study
The Propagation and Breeding of Distinctive Cannabis
by Robert Connell Clarke



The Cultivator's
Handbook

INDOOR/OUTDOOR

MARIJUANA GROWER'S GUIDE

by Mel Frank and Ed Rosenthal

The classic introductory work on cultivation. HTB/4 \$5.95

INDOOR MARIJUANA

HORTICULTURE

by High Times' Indoor expert
Jorge Cervantes

The book all indoor growers must have. It is the most complete, authoritative, up-to-date book on indoor marijuana cultivation ever! This 288-page edition is well illustrated with over 250 photographs, drawings and graphs. It is packed full of information on grow rooms, grow lamps, electricity, container gardening, water, fertilizer, hydroponics, air, CO₂, bugs, fungi, cloning, harvesting, breeding and it has a garden calendar, index, glossary and directory of indoor garden suppliers! HTB/42 \$14.95

CANNABIS ALCHEMY: THE ART OF MODERN

HASH MAKING

by D. Gold

Turn that moldy old bag of ditchweed into some hi-test hashish by simply following the method outlined in this book. Written specifically for the layman, with diagrams. HTB/13 \$5.95

MAMA COCA

by Antonii

A well documented presentation of how wholesale dope movers and narcotics officials actively collaborate in the international drug trade. HTB/21 \$8.95

THE ART AND SCIENCE

OF COOKING WITH CANNABIS

by Adam Gottlieb

More than just another collection of marijuana recipes, this book teaches the reader the nature of cannabis, how it combines with other foods and how it is best assimilated by the digestive tract. A must for anyone serious about cooking with grass. HTB/14 \$4.95

MARIJUANA BOTANY

by Robert Connell Clarke

Contains the newest data on all phases of cannabis cultivation. How quality is affected by climate, identifying male plants, harvesting, THC production and potency. HTB/46 \$14.95

Marijuana Beer

HOW TO MAKE YOUR OWN HI-BREW BEER



AS TOLD TO ED ROSENTHAL BY U.B.

LABELS &
STICKERS
INCLUDED

MARIJUANA BEER

as told to Ed Rosenthal by U.B.

This book tells you how to brew your own delicious Hi-Brew Beer. Simple easy-to-follow instructions help you turn, shake and lower leaves into refreshing high-potency suds. HTB/49 \$9.95

THE SINSEMIILLA TECHNIQUE

by Kayo

Written for the curious as well as the experienced, this technique tells how fewer plants in smaller pots can yield more cannabis of higher quality. The book includes photographs and illustrations. HTB/30 \$12.95

HOW TO GROW HERBS

HYDROPONICALLY

compiled by Patrick Daniels

All the information you need to grow your favorite plants in a fraction of the time it takes with conventional methods. HTB/45 \$7.95

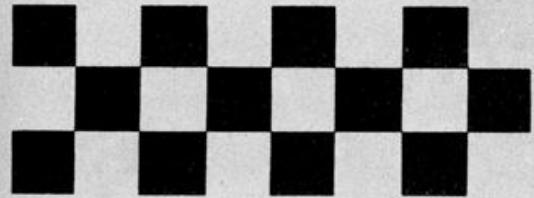
HOW TO BUILD A BIGGER

AND BETTER HYDROPONIC GARDEN

by Ed Sherman

How to make a super-garden that will grow anything, anywhere, from scrap materials. HTB/27 \$5.95

bookstore



THE MUSHROOM CULTIVATOR

by Paul Stamets and Jeff Chilton

For amateurs and professionals alike, a practical guide to growing mushrooms at home. Excellent illustrations, and how to obtain the needed equipment and supplies. Step-by-step directions for every procedure for growing the mushrooms of your choice. 415 pgs. HTB/37 \$24.95

INDOOR MARIJUANA CULTIVATION

compiled by Murphy Stevens

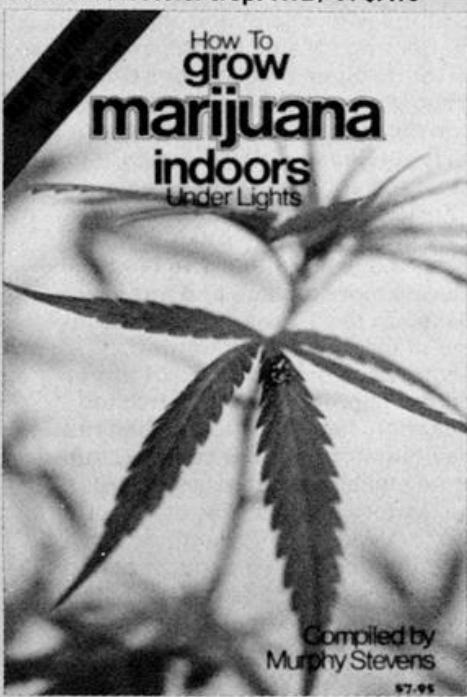
Simple directions and accompanying photographs make this book informative and easy to follow. Learn the best methods of growing marijuana indoors with lights. HTB/40 \$5.95

HOW TO GROW MARIJUANA

INDOORS — UNDER LIGHTS

by M. Stevens

Grow marijuana all year long under lights with the help of this photo-filled book. Simple instruction, from germinating seeds to the proper lighting, help the home grower have a successful crop. HTB/41 \$7.95



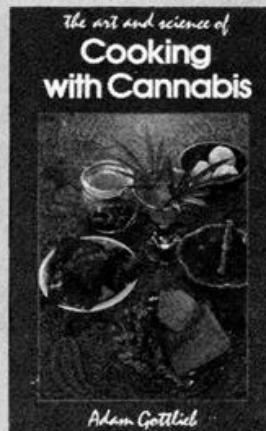
Compiled by
Murphy Stevens

\$7.95

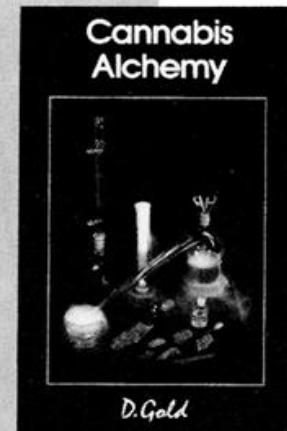
SINSEMILLA

by Jim Richardson

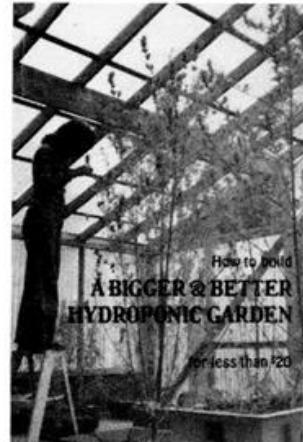
A photographic tour de force of the virgin pot plants, with instructions on how to grow your own. HTB/1 \$19.95



Adam Gottlieb



D. Gold



How to build

A BIGGER & BETTER
HYDROPONIC GARDEN

for less than \$20

the HIGH TIMES bookstore

HOW TO IDENTIFY AND GROW

PSILOCYBIN MUSHROOMS

by Jule Stevens and Rich Gee

This book tells how to identify psilocybin mushrooms, as well as how to grow them in your own home. Color photographs make for an easy-to-follow and informative book. HTB/38 \$6.95

PSILOCYBE MUSHROOMS AND THEIR ALLIES

by Paul Stamets

Literally everything you ever want to know about hallucinogenic mushrooms can be found within this book. Complete with dozens of color photographs, diagrams, and glossary, it will prove an invaluable addition to your psychedelic library. HTB/16 \$12.95

HOW TO GROW THE FINEST HERB INDOORS

by Murphy Stevens

This book on growing marijuana indoors brings new information on pruning, curing and drying, as well as equipment, lights, and fertilizers for a more satisfactory homegrown crop. HTB/39 \$9.95

HYDRO-STORY

by Charles E. Sherman and Hap Brenizer

How to grow the easy way, get big yields from little gardens in your backyard, patio, apartment, etc. HTB/36 \$4.95

MARIJUANA:

THE CULTIVATOR'S HANDBOOK

by Bill Drake

The most up-to-date information for the outdoor and indoor marijuana cultivator, with over 100 photographs, drawings, charts, maps and a special section on psychoactive tobacco. HTB/25 \$14.95

THE PRIMO PLANT

by Mountain Girl

Complete instructions for growing fine, organic sinsemilla marijuana, the seedless variety prized by connoisseurs for its exquisite high. HTB/23 \$4.50

Please send me the books I have indicated below:

BOOK #	QUANTITY	x	PRICE	=	COST
HTB/1			\$19.95		
HTB/4			\$ 5.95		
HTB/13			\$ 5.95		
HTB/14			\$ 4.95		
HTB/16			\$12.95		
HTB/21			\$ 8.95		
HTB/23			\$ 4.50		
HTB/25			\$10.95		
HTB/27			\$ 5.95		
HTB/30			\$14.95		
HTB/36			\$ 4.95		
HTB/37			\$24.95		
HTB/38			\$ 6.95		
HTB/39			\$ 9.95		
HTB/40			\$ 5.95		
HTB/41			\$ 7.95		
HTB/42			\$14.95		
HTB/45			\$ 7.95		
HTB/46			\$14.95		
HTB/49			\$ 9.95		

Subtotal \$

Sales tax NYS residents \$

Add \$1.75 shipping for each book \$

Grand Total \$

HTB HTB HTB HTB HTB

New York residents please add applicable sales tax. Alaska, Hawaii, Canada & Foreign add \$2.50 per book for postage and handling.

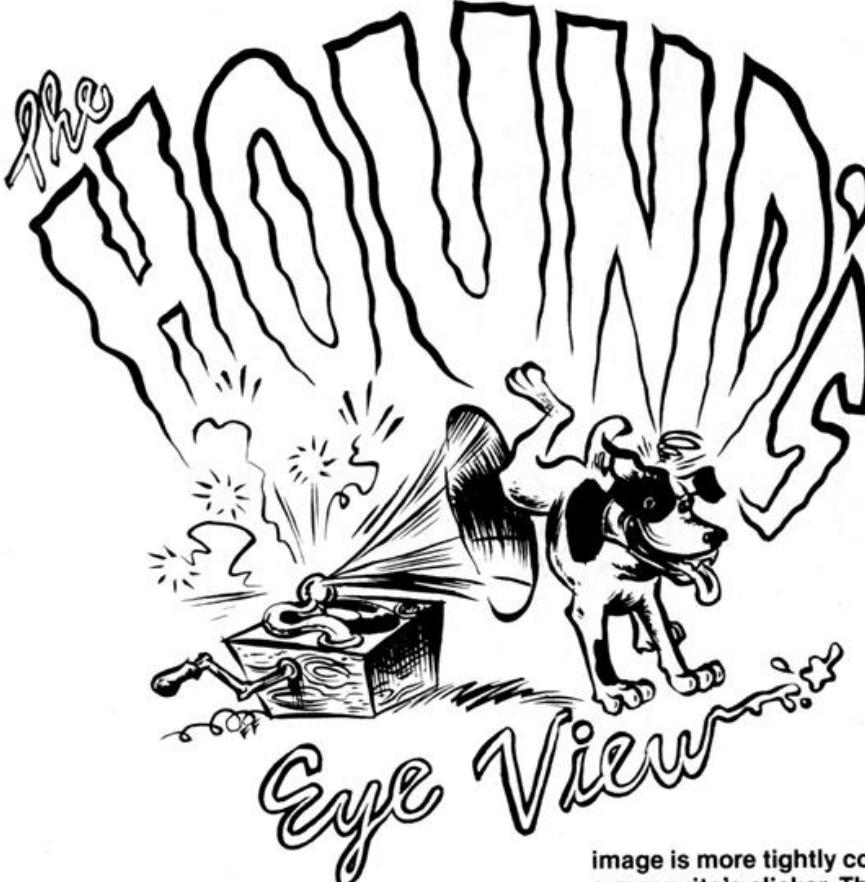
Make check or money order payable to H. T. Bookstore. Mail to: HIGH TIMES Books, P.O. Box 1645, Grand Central Sta., New York, NY 10017. Please allow 6-8 weeks for processing and delivery.

NAME _____

ADDRESS _____

CITY _____

STATE _____ ZIP _____



Eye View

By James Marshall

I'm beginning to think it's no accident **Bruce Springsteen** has become the reigning rock icon of the Reagan administration, a time when Orwellian double-think passes for logic, and romanticized crap loaded with right- and left-wing garbage passes for rock.

For example: Why didn't Springsteen just tell Reagan to fuck off?

And why aren't his rock star digs available for public viewing on **Lifestyles of the Rich and Famous**? Does he think he's better than Joan Collins or Liberace? Are we supposed to believe he lives in a tenement?

And what do we really know about his wife? I heard her complaining on the news that "the worst thing that ever happened to her was getting braces." I guess it takes a special kind of girl to appreciate a man who refers to women as **little girl** in all his songs.

One final complaint. Why can't the guys in the band smoke herb, Bruce? Some friends of mine were recording down the hall a few years back and said the band was totally paranoid about gettin' caught smoking by the Boss. Isn't real rock 'n' roll supposed to be free from stupid laws, petty morals and self-righteous fascism?

The unfortunate answer to all these questions is that Springsteen's media

image is more tightly controlled than a mosquito's clicker. The yuppies and neo-conservatives are shown the flag-waving, commie-killing Rambo, while the liberals are led to believe he's a tear-jerking, bleeding heart of social concern.



One guy who'd never be silly enough to put his butt on an album cover is **Hasil Adkins**. No, Hasil'd rather be seen dippin' into some clam, as the cover of his new disc **THE WILD MAN** (*Norton*) will attest to. Here is a man who doesn't have to come off as some sort of blue collar hero to his audience; he's too busy playing guitar and drums at the same time, and thinking about important things, like girls, cars, fried chicken, and decapitation.

Raised in a tar paper shack in the coal mining mountains of West Virginia, Adkins has been recording primitive one-man band music for 30 years on a one-track machine. Crazed rock 'n' roll classics like "She Said,"



Above: Hasil goes clam dippin' on his new album cover.

"The Hunch," "Chicken Walk," and "No More Hotdogs" were released sporadically on a handful of labels to a not-quite-ready public. These obscure sides and several hours of previously unreleased material managed to surface last year on four LP's and one EP from three different labels in three different countries: **OUT TO LUNCH** and **HAZE'S HOUSE PARTY** (*Norton, US*), **CHICKEN WALK** and **ROCK 'N' ROLL TONIGHT** (*Dee Jay Jamboree, West Germany*), and **HE SAID** (*Big Beat, UK*).

Not only does Adkins play rockabilly guitar like a countryfied Lightnin' Hopkins on Methedrine, but he sings with wild abandon, interjecting satanic laughs and freaky cartoon voices. These sides have brought him world acclaim (though little dinero) and paved the way for his current release, Adkins' first venture into a real recording studio.

Fortunately, modern technology does little to change Adkins' hunch and grind. If anything, **The Wild Man** sounds more savage and possessed. Eleven of the 14 songs are done in one-man band style recorded in single takes over a period of three nights. There's some very twisted rockabilly here, a couple of ballads, the obligatory murder fantasy, and some classics twisted inside out (dig the Carter Family's "Foggy Mountain Top" revved up to 78 rpm). Adkins even includes some collaborations with a New York combo, The A-Bones, which sound like backwoods Velvet Underground.

The choice is yours, folks: A phoney, media-made creation who makes a billion bucks a year, or a real folk hero who lives in a tar paper shack and churns out demented rock 'n' roll like he's just passin' time 'till judgment day. ●



IT'S EASIER THAN YOU THINK TO GET YOUR VOTE ON THE TOP 100! TRY IT! IT'S FUN!

#1

#2

#3

P.S. HARDLY ANYONE VOTED FOR ANYTHING THAT WAS ON THE LIST! THAT'S HOW OLLIE WON FIRST PLACE.

SEND IN YOUR VOTE FOR THE TOP 100! FILL OUT THIS OFFICIAL BALLOT (OR A FACSIMILE - BUT ONLY ONE VOTE PER PERSON) + MAIL IT TO: THE HIGH TIMES TOP 100 211 EAST 43RD ST. NEW YORK, N.Y. 10017

A Truly Unique Place To Hide Your Jewelry, Money, or?



BURGLAR FOOLER™

The can is real and the exact size, color, etc., as the real product (used with permission of the individual manufacturers). The bottom unscrews to reveal a compartment almost the full length of the can. Works just like the products normally enclosed.

Bottom Unscrews • Cannot be Detected

Put Vanish Under Your Sink in the Bathroom.
Who Would Ever Think!

Lady Travelers:
Keep Your Jewelry or Money in Image Hairspray

Attention Male Travelers:
Keep Valuables in Desenex Can When You Travel

Shipped UPS in 4 days

Van Pler & Tissany
FINE JEWELERS
325 S. Robertson Blvd.
Beverly Hills, CA 90211-3602

CALL TOLL-FREE 1-800-237-8104
In Calif. call 1-800-237-7551
8 a.m. to 6 p.m., Mon. thru Sat.
Pacific Coast Time

Please ship the following sales immediately:

How Many	Price Ea.	Total
— No. S1749, Image, Burglar Fooler	\$19.95	_____
— No. S1750, Vanish, Burglar Fooler	\$19.95	_____
— No. S1751, Desenex, Burglar Fooler	\$19.95	_____

Name _____ Total _____

Address _____ Apt. _____ CA Res. Add _____

City _____ Shipping _____ \$2.00

State _____ Zip _____ Total _____

Bill My Credit Card: VISA MasterCard Am. Express
 Payment Enclosed Diners Carte Blanche Discover # 570
 Card# _____ Exp. Date _____

new 1988 Calendar!

HIGH TIMES

DO NOT SEND CASH!

Send check or money order payable to:

HIGH TIMES CALENDAR

211 East 43rd Street
New York, NY 10017

Send me _____ Calendars at \$6.95

NAME _____

ADDRESS _____

CITY _____

STATE _____

ZIP _____

1988 CALENDAR

Send coupon or a facsimile.





THE ULTIMATE GROWING SYSTEM

Starts with the AQUAFARM™ modular system.

An expandable hydro system that allows you to start with a single module then add up to as many as 12. The unique AIRFLO™ pumping system creates growth and yield faster than any other modular system on the market. It is completely automatic and virtually

problem free. Beware of imitations, they are not a genuine AQUAFARM.

Each system includes: GROROX™ growing medium, AIRFLO pumping system, General Hydroponics grow and bloom nutrients, pH test kit and complete instructions.

Priced at: single \$58.00, four modules \$198.00, six modules \$295.00, eight modules \$389.00, ten modules \$450.00 and 12 modules \$530.00. (Controller included in groups of four, six eight, ten and twelve module systems.)

Introducing the AQUAFARM AEROFLO™ system.

Diamond Lights and General Hydroponics are proud to offer aeroponic technology to the home grower. The AEROFLO

system is the most advanced hydroponic growing system available in the world today! It has demonstrated extraordinary results in cloning and regenerating plants from cuttings. This system is capable of growing 24 clones to maturity in 6 weeks using the "Sea of Green Method."

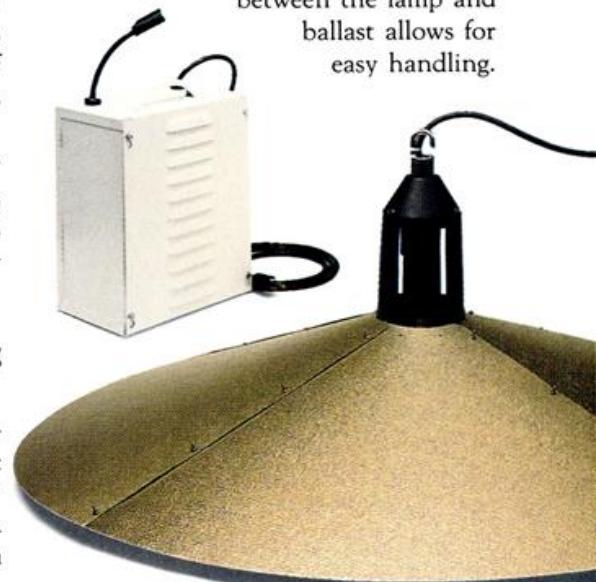
Each system includes: Rockwool growing medium, AIRFLO pumping system, General Hydroponics grow and bloom nutrients, pH test kit and complete instructions. Priced at: \$289.00.

Top it off with the best lighting systems in the business.

Your choice of our TEXTURE-WHITE™ finish on the 21" parabolic hood, 45" standard hood, or our new 45" parabolic hood with any of our lights. A whisper quiet heavy-duty ballast with a ventilated and double paneled enclosure for maximum cooling.



Also included: 20' 600 V lamp cord, plus 8' power cord. Our unique molded plug between the lamp and ballast allows for easy handling.



Priced at: 1000 Super Halide \$198.00, 1000 H.P. Sodium \$258.00, 400 Halide \$138.00, 400 H.P. Sodium \$188.00.

We also carry Suncircle, Solar Shuttle, CO₂ and a complete line of growing accessories.

SEE OUR AD ON PAGE 7

For ordering or free catalog call TOLL FREE
800-331-3994 or 415-459-3994.

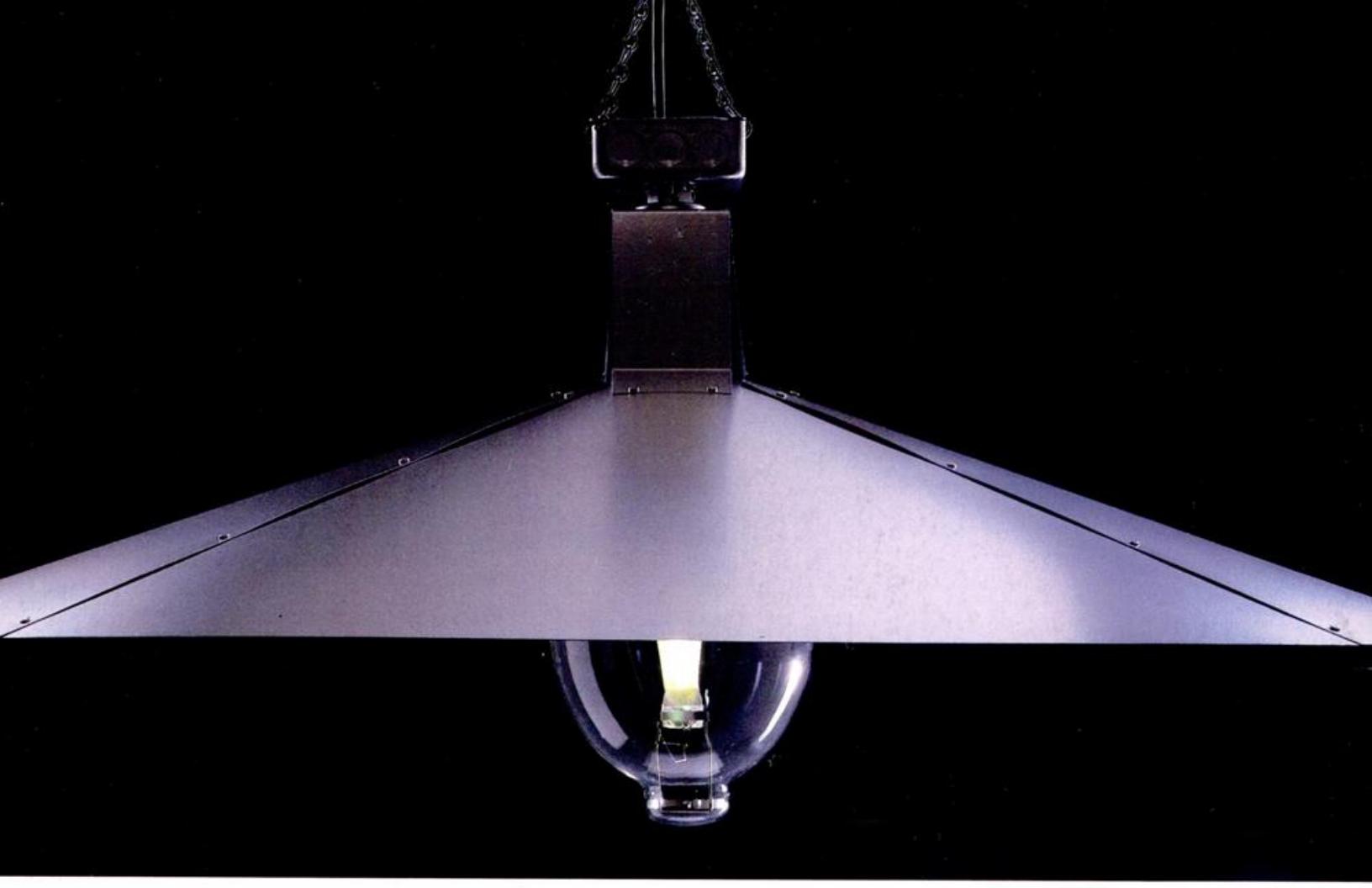
DIAMOND LIGHTS

713 Mission Avenue • San Rafael, CA 94901

"We are different from the rest."

- Money order, credit card, COD orders shipped within 24 hrs.
- Prices do not include shipping.
- Dealer inquiries welcome.





HOW TO BUY THE MOST SUPERIOR HALIDE SYSTEM IN THE WORLD.

The process of choosing the right Halide system no longer has to be a game of Hide and Seek. For over four years we at Ram Enterprises have taken pride in producing the highest quality metal Halide indoor gardening systems. Each is complete with a full one year guarantee, not

ture. We also use high-temperature triple-jacketed 600-volt wire for your absolute safety. And as an added feature, pulse-rated bulb sockets of 5-KV.

If you've been buying anywhere else, you owe it to yourself to give us a call. You'll see that next to Ram Enterprises, all other Halide manufacturers are still in the Dark Ages.

Specifications and Prices

System A. 1000-watt Super Halide Sylvania MS 1000, clear or coated bulb, your choice of reflector (45 in. recommended) \$199.00

System B. 1000-watt high-pressure sodium LU 1000 Sylvania bulb, your choice of reflector (45 in. recommended) \$265.00

Bulbs only
MS 1000 BU clear Sylvania \$62.00

Prices do not include shipping & handling.

MS 1000 C/BU coated \$62.00
MS 400 Sylvania \$45.00

High-pressure sodium LU 1000

Sylvania \$69.95

High-pressure sodium LU 400
Sylvania \$45.00

Complete line of accessories.



The no-bullshit Halide specialists.
Call 1-800-426-5577
In Washington 206-833-8280

System

Name

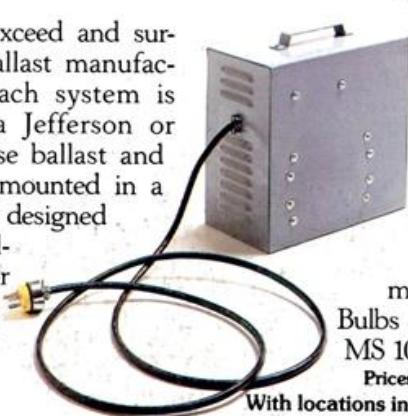
Address

City

State

Zip

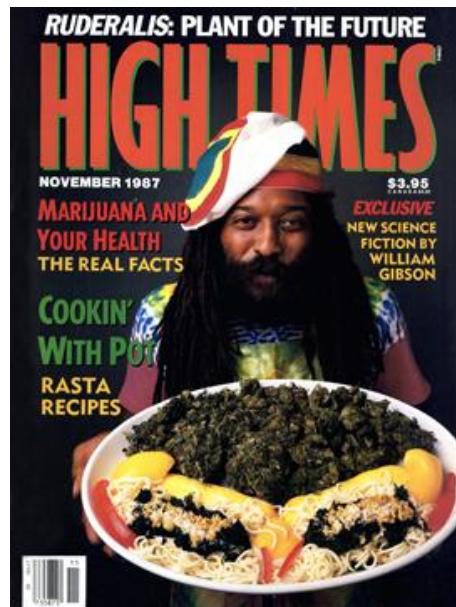
TO ORDER: Send cashiers check, money order or C.O.D. order (send 20% deposit) to:



With locations in Washington, Oregon and California. © 1983 M&R LIGHTING, INC.

High Times

NOVEMBER 1987



Reprinted from the High Times Archive

<https://archive.hightimes.com/issue/19871101/print>



©2023 - HIGH TIMES ARCHIVE. ALL RIGHTS RESERVED.